

ERRATA.

- Page 45, under Botany IV, for "wallophytes" read "thallophytes."
" " " " V, for "petridophytes" read "pteridophytes."
" " " " V, third line, for Botany III read Botany II.
" " " " VI, for "spermalophytes" read "spermatophytes."
" " " " VI, for "bymnosperms" read "gymnosperms."
" " " " VII, third line, for "imhibition" read "imbibition."
" " " " VII, fifth line, for "imitation" read "irritation."
" " " " VII, tenth line, for "Sochs" read "Sachs."
" " " " IX, for "celluloid" read "celloidin."
" 117, " Summary, totals should read 955, 366, 1321.
" 118, the total for 1900-01 should read 1321.

Catalogue
1900-'01.

THIRTY-EIGHTH ANNUAL CATALOGUE

OF THE

Officers, Students and Graduates

OF THE

KANSAS STATE

Agricultural College

MANHATTAN,

1900-'01.

MANHATTAN, KANSAS.

Terms and Vacations.

Fall Term, 1901, Thirteen Weeks.

WEDNESDAY, SEPTEMBER 18.—Examination for admission, at 9 A. M.
THURSDAY, SEPTEMBER 19.—College year begins.
TUESDAY, SEPTEMBER 24.—Short course in domestic science begins.
SATURDAY, NOVEMBER 2.—Examination.
THURSDAY AND FRIDAY, DECEMBER 19, 20.—Examination at close of term.

Winter Term, 1902, Twelve Weeks.

MONDAY, JANUARY 6.—Examination for admission, at 9 A. M.
TUESDAY, JANUARY 7.—Winter term begins.
TUESDAY, JANUARY 7.—Short courses in agriculture, horticulture and dairying begin.
SATURDAY, JANUARY 25.—Annual inter-society oratorical contest.
SATURDAY, FEBRUARY 15.—Examination.
THURSDAY AND FRIDAY, MARCH 27, 28.—Examination at close of term.

Spring Term, 1902, Eleven Weeks.

MONDAY, MARCH 31.—Examination for admission, at 9 A. M.
TUESDAY, APRIL 1.—Spring term begins.
SATURDAY, MAY 10.—Examination.
TUESDAY AND WEDNESDAY, JUNE 17, 18.—Examination at close of year.
JUNE 15 TO 19.—Exercises of commencement week.
THURSDAY, JUNE 19, at 10 A. M.—Commencement.
JUNE 20 TO SEPTEMBER 17.—Summer vacation.

Fall Term, 1902.

WEDNESDAY, SEPTEMBER 17.—Examination for admission, at 9 A. M.
THURSDAY, SEPTEMBER 18.—College year begins.

Board of Regents.

HON. J. S. McDOWELL (1905),* *President*,
Smith Center, Smith county.

HON. F. D. COBURN (1905), *Vice-president*,
Kansas City, Wyandotte county.

HON. E. T. FAIRCHILD (1903), *Treasurer*,
Ellsworth, Ellsworth county.

HON. WM. HUNTER (1903), *Loan Commissioner*,
Blue Rapids, Marshall county.

HON. J. M. SATTERTHWAITE (1903),
Douglass, Butler county.

HON. S. J. STEWART (1905),
Humboldt, Allen county.

PRES. E. R. NICHOLS (*ex officio*), *Secretary*,
Manhattan, Riley county.

MISS LORENA E. CLEMONS, *Assistant Secretary*,
Manhattan.

*Term expires.

Board of Instruction.

FACULTY.

ERNEST R. NICHOLS, D. B. (Iowa State Normal School), A. M. (University of Iowa),
President.

JOHN D. WALTERS, M. S. (Kansas State Agricultural College),
Professor of Industrial Art and Designing.

ALEXANDER B. BROWN (Boston Music School), A. M. (Olivet),
Professor of Music.

JULIUS T. WILLARD, M. S. (Kansas State Agricultural College),
Professor of Applied Chemistry.

ALBERT S. HITCHCOCK,^a M. S. (Iowa State Agricultural College),
Professor of Botany.

PAUL FISCHER,^b B. Agr., M. V. D. (Ohio State University),
Professor of Veterinary Science.

FREDRIC AUGUSTUS METCALF, O. M. (Emerson College of Oratory),
Professor of Oratory.

GEORGE F. WEIDA, Ph. D. (Johns Hopkins),
Professor of Pure Chemistry.

HENRY M. COTTRELL, M. S. (Kansas State Agricultural College),
Professor of Agriculture, Superintendent of Farm.

Miss MINNIE AVA NELLIE STONER (Boston Normal School of Household Arts), B. S. (South Dakota Agricultural College),
Professor of Domestic Science.

JOSEPH D. HARPER,^c M. S. (Rosé Polytechnic Institute),
Professor of Mechanical Engineering, Superintendent of Shops.

EDWIN A. POPENOE, A. M. (Washburn),
Professor of Horticulture and Entomology, Superintendent of Orchards and Gardens.

FRANK C. LOCKWOOD, Ph. D. (Northwestern),
Professor of English.

^a. Till March 1, 1901.

^b. Till September 1, 1900.

^c. Till February 1, 1901.

KANSAS STATE AGRICULTURAL COLLEGE.

BENJAMIN L. REMICK, Ph. M. (Cornell College),
Professor of Mathematics.

BENJAMIN F. EYER,
Professor of Physics and Electrical Engineering.

CHARLES E. GOODELL, A. M. (Franklin),
Professor of History and Economics.

SEPTIMUS SISSON, S. B. (Chicago), V. S. (Toronto),
Professor of Zoology.

TAIT BUTLER,^d V. S. (Toronto),
Professor of Veterinary Science.

HERBERT F. ROBERTS,^e A. B. (University of Kansas), M. S. (Kansas State
Agricultural College),
Professor of Botany.

MISS HARRIET HOWELL (Pratt Institute),
Superintendent of Domestic Art.

JOSHUA D. RICKMAN (I. T. U.),
Superintendent of Printing.

MISS JOSEPHINE T. BERRY, A. B. (University of Kansas),
Librarian.

B. S. MCFARLAND, A. M. (Miami),
Principal Preparatory Department.

MISS FLORENCE BALL,^f
Director of Physical Training.

MISS GERTRUDE WILLIAMS,^g
Director of Physical Training.

MISS LORENA E. CLEMONS, B. S. (Kansas State Agricultural College),
SECRETARY.

Assistants.

DANIEL H. OTIS, M. S. (Kansas State Agricultural College),
Assistant Professor of Dairying.

WILLIAM ARCH MCKEEVER, A. M. (University of Kansas),
Assistant Professor of English and Philosophy.

d. Since December 13, 1900.

e. Since March 27, 1901.

f. Died December 9, 1900.

g. Since February 4, 1901.

MISS JOSEPHINE C. HARPER,
Instructor in Mathematics.

MISS ALICE RUPP (Indiana State Normal),
Instructor in English.

CHARLES EASTMAN,
Cadet Major and Acting Commandant.

WILLIAM L. HOUSE,
Foreman of Carpenter Shop.

CHAS. W. PAPE, M. S. (Kansas State Agricultural College),
Assistant in Zoology and Assistant Curator of Museum.

ROBERT W. CLOTHIER, M. S. (Kansas State Agricultural College),
Assistant in Chemistry.

MARGARET J. MINIS,
Assistant Librarian.

ROBERT H. BROWN, M. T. (Kansas Conservatory of Music), B. S.
(Kansas State Agricultural College),
Assistant in Music.

JOHN M. WESTGATE, M. S. (Kansas State Agricultural College),
Assistant in Botany.

MISS MAY SECREST, B. S. (Kansas State Agricultural College),
Assistant in Domestic Art.

WM. ANDERSON, B. S. (Kansas State Agricultural College),
Assistant in Mathematics.

MISS GERTRUDE BARNES,
Assistant Librarian.

ALBERT DICKENS, B. S. (Kansas State Agricultural College),
Assistant in Horticulture.

WILLIAM BAXTER,
Foreman of Greenhouses.

JOHN G. HANEY,^a B. S. (Kansas State Agricultural College),
Assistant in Field and Feeding Experiments.

MISS MARY B. PRITNER, B. S. (Kansas State Agricultural College),
Assistant in Domestic Science.

THEODORE LINDQUIST, M. S. (Northwestern),
Assistant in Physics.

^a. Till March 1, 1901.

KANSAS STATE AGRICULTURAL COLLEGE.

W. M. SAWDON, B. S. (Purdue),
Assistant in Mechanics.

MISS ADA RICE, B. S. (Kansas State Agricultural College),
Assistant in Preparatory Department.

LOUIS WABNITZ,
Foreman Iron Shops.

HENRY VAN LEEUWEN (University of Wisconsin D. S.),
Instructor in Cheese-making.

E. W. CURTIS (University of Wisconsin D. S.),
Instructor in Butter-making.

MISS FLORENCE L. GRANT (Massachusetts Normal Art School),
Assistant in Drawing.

A. T. KINSLEY, B. S. (Kansas State Agricultural College),
Assistant in Veterinary Science.

MISS ELIZABETH J. AGNEW, B. S. (Kansas State Agricultural College),
Assistant in Domestic Science.

JESSE B. NORTON, B. S. (Kansas State Agricultural College),
Assistant in Entomology.

E. C. GASSER,
Foreman of Foundry and Blacksmith Shop.

ADELAIDE F. WILDER, M. S. (Kansas State Agricultural College),
Assistant, Domestic Science Short Course.

MISS INA E. HOLROYD, B. S. (Kansas State Agricultural College),
(Kansas State Normal),
Assistant in Preparatory Department.

Other Officers.

JACOB LUND, M. S. (Kansas State Agricultural College),
Engineer.

MISS C. JEANETTE PERRY, B. S. (Kansas State Agricultural College),
Executive Clerk.

MISS MATILDA C. DOLL,
Stenographer and Clerk.

W. R. LEWIS,
Janitor.

ARCHIE HUYCKE,
Secretary to President.

Experiment Station.

Council.

President NICHOLS, Chairman.
Professor WILLARD, Chemist and Director.
Professor HITCHCOCK,^a Botanist.
Professor FISCHER,^b Veterinarian.
Professor COTTRELL, Agriculturist.
Professor POPENOE, Entomologist and Horticulturist.
Professor BUTLER,^c Veterinarian.
Professor ROBERTS,^d Botanist.

Miss CLEMONS, *Secretary.*

-
- a.* Till March 1, 1901.
b. Till September 1, 1900.
c. Since December 13, 1900.
d. Since March 27, 1901.

Assistants.

DANIEL H. OTIS, M. S., Assistant in Dairying.
PERCY J. PARROTT,¹ A. M., Assistant in Entomology.
ROBERT W. CLOTHIER, M. S., Assistant in Chemistry.
ALBERT DICKENS, B. S., Assistant in Horticulture.
JOHN M. WESTGATE, M. S., Assistant in Botany.
JOHN G. HANEY,² B. S., Assistant in Field and Feeding Experiments.
ALBERT T. KINSLEY, B. S., Assistant in Veterinary Science.
JESSE B. NORTON,³ B. S., Assistant in Entomology.
Miss ALICE M. MELTON, Clerk in Director's Office.

¹ Till August 15, 1900.

² Till March 1, 1901.

Since November 1, 1900.

Student Assistants

C. N. ALLISON, Horticulture.
S. I. BORTON, B. S., Horticulture.
E. W. DOANE, Veterinary Science.
O. H. ELLING, Farm.
JOSEPHINE FINLEY, B. S., Arithmetic.
C. A. GINGERY, Horticulture.
J. D. GRAHAM, Veterinary Science.
G. O. GREENE, B. S., Horticulture.
F. W. HASELWOOD, Chemistry.
MARIE HJORT, Stenographer.
E. W. HOUSE, Carpentry.
R. G. LAWRY, Mechanics.
KATE MANLY, B. S., U. S. History and Geography.
MYRTLE MATHER, U. S. History, Arithmetic, Reading, and Spelling.
W. E. MATHEWSON, Chemistry.
HARRIET NICHOLS, B. S., Algebra and Chemistry.
F. C. NICHOLSON, Foundry.
KATE PADDOCK, B. S., Domestic Art.
G. D. REYNOLDS, Principles of Mechanism.
C. A. SCOTT, Agriculture and Horticulture.
R. D. SCOTT, Chemistry.
STELLA THARP, Chemistry.
F. E. UHL, B. S., Dairying.
H. N. VINALL, Horticulture.
C. C. WINSLER, Dairying.

The College Battalion.

The following is the roster of the commissioned and non-commissioned officers of the Kansas State Agricultural College corps of cadets for 1900-1901:

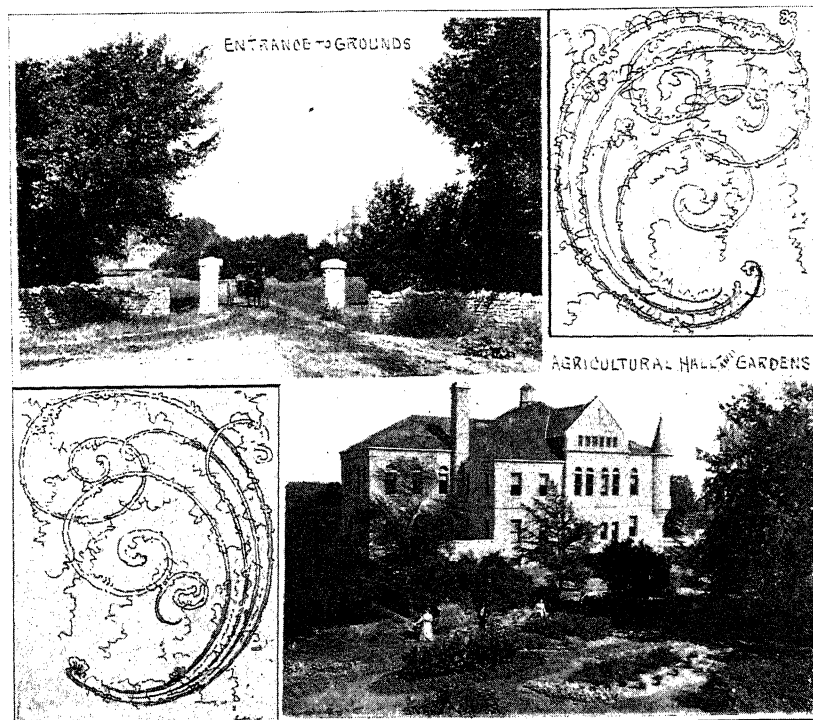
CHARLES EASTMAN,
Major, and Commandant of Cadets.

STAFF.

J. F. ROSS.....First Lieutenant and Adjutant.
P. H. ROSS.....First Lieutenant and Quartermaster.
H. A. AVERY.....Second Lieutenant and Signal Officer.
E. N. RODELL.....Sergeant-major.
R. W. DE ARMOND.....Color Sergeant.
J. A. CORRELL.....Principal Musician.

INFANTRY, BY COMPANIES.

RANK.	"A" company.	"B" company.	"C" company.	"D" company.
Captain.....	H. F. Butterfield.	F. Myers	C. A. Scott.....	J. H. Oesterhaus.
First Lieutenant...	B. Poole.....	R. Faris.....	H. N. Vinall.....	G. F. Bean.
Second Lieutenant,	M. S. Cole.....	G. R. Shepherd ..	E. P. McDowell..	R. C. Cole.
First Sergeant.....	G. F. Fockele	R. F. Bourne.....	A. H. Leidigh....	R. B. Mullen.
Second Sergeant...	H. A. Sidorfsky ..	J. K. Taber.....	A. H. Sanderson..	C. W. McKeen.
Third Sergeant....	H. T. Nielsen.....	W. D. Davis.....	A. J. Reed.....	H. Tracy.
Fourth Sergeant....	H. W. Baker.....	N. L. Town	E. C. Farrar.....	E. W. Coldren.
Fifth Sergeant.....	O. P. Drake.....	J. Tompkins	J. M. Scott.....	F. A. Blakslee.
First Corporal	W. L. English....	W. Greene.....	W. O. Gray.	T. W. Buell.
Second Corporal...	R. A. Oakley	A. M. Nash.....	A. L. Hallstead..	I. L. Nixon.
Third Corporal.....	D. V. Corbin.....	W. Samuel.....	J. S. Houser.....	T. E. Dial.
Fourth Corporal...	E. E. Kernohan..	P. A. Cooley.....	W. Turnbull.....	J. E. Tanner.
Fifth Corporal.....	C. S. Cole	J. A. Craik.....	W. C. Lane.....	O. B. Whipple.
Sixth Corporal.....	L. D. Murray	T. W. Woodworth,	E. H. Hodgson...	L. C. Chase.



History and Resources.

THE income of the College is derived from two sources—national and state. The original land-grant act was signed by President Lincoln July 2, 1862. This act appropriated 30,000 acres of land for each senator and representative in congress. Under the provisions of this act this state was to receive 90,000 acres. The amount actually received for 82,313.52. This land was to be sold and the proceeds to be a permanent endowment, to be invested in bonds bearing not less than five per cent. interest, the income from these bonds to be used for the support of at least one college in each state. The second provision of section 5 reads as follows: "No portion of said fund, nor interest thereon, shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation or repair of any building or buildings." The amount of this endowment is \$503,848. This has been increasing until recently, on account of buying bonds below par. The income derived from this endowment since 1880 is given in the column headed "Income Fund," p. 16.

Under this act, the state of Kansas, in 1863, established the State Agricultural College, by endowing Bluemont College, which had been erected two miles from Manhattan, under the auspices of the Methodist Episcopal Church, but was presented to the state for the purpose named in the act of congress.

In 1873 the College was reorganized upon a thoroughly industrial basis, with prominence given to practical agriculture and related sciences; and in 1875 the furniture and apparatus of the College were moved to the farm of 223 acres, one mile from the city of Manhattan.

In March, 1887, congress passed the so-called "Hatch bill," which provided for the organization in each state of a station for agricultural experiments, and gave to each an annual appropriation of \$15,000 for this purpose. See "Experiment Station," p. 21.

On August 30, 1890, another act was passed by congress, known as the "college-aid bill," or "Morrill bill." It provided for an annual appropriation, beginning with \$15,000 for year ending June 30, 1890, with an annual increase for ten years of \$1000 over the preceding year, the annual amount thereafter to each state to be \$25,000. This money is "to be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural and economic sciences, with especial reference to their applications in the industries of life and to the facilities for such instruction."

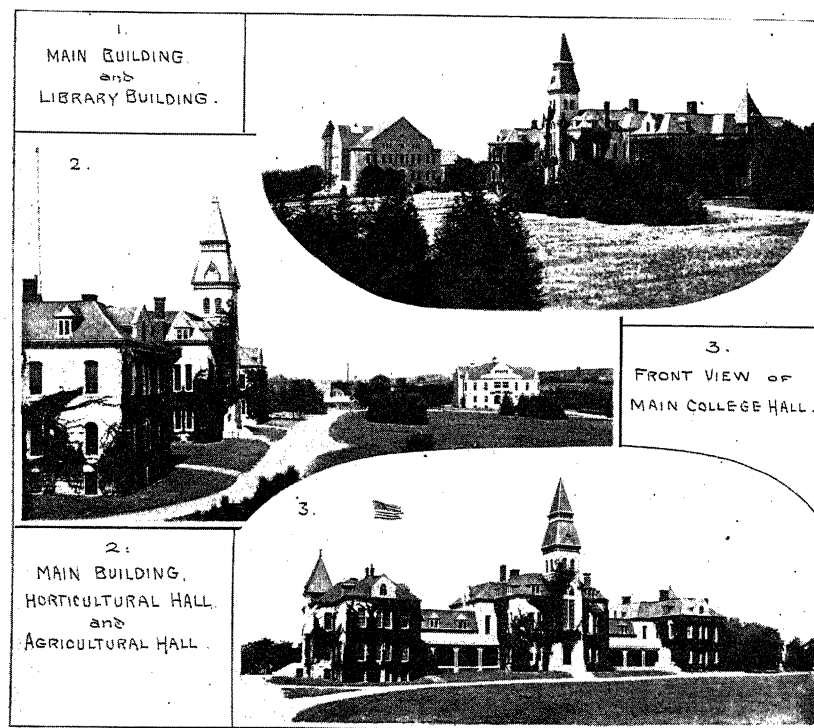
TABULATED FINANCIAL EXHIBIT.

FISCAL YEAR.	STATE APPROPRIATIONS.							NATIONAL APPROPRIATIONS.			Expense.....	Inventory increase.....	Graduates.....	Enrolment.....
	Miscellaneous....	Current expense.	Water and coal..	Regents, etc.....	Repairs	Library	Equipment.....	Buildings	Total.....	Income fund.....	Morrill fund.....	Hatch fund		
1893-94	\$17,979 ¹			\$1,251	\$800		\$1,950	\$15,615	\$155,302	\$96,000			56	
1894-95				1,398				4,001	3,316	287			9	
1895-96				1,884				17,388	19,784	267			12	
1896-97				1,884				17,388	19,784	267			12	
1897-98				1,415	500		500	10,415	20,680	317			17	
1898-99	4,613 ¹			1,637	500		500	10,415	20,680	317			17	
1899-00				1,708	700		600	12,008	23,208	402			21	
1900-01				1,708	700		600	12,008	23,208	402			21	
1901-02				2,047	1,400		4,700	17,584	16,197	451			21	
1902-03	2,264 ¹			1,815	1,000		2,600	10,200	8,537	451			22	
1903-04	3,000 ²			3,410	1,000		2,600	10,200	8,537	451			22	
1904-05				1,698	1,000		2,600	10,200	8,537	451			22	
1905-06				1,698	1,000		2,600	10,200	8,537	451			22	
1906-07				1,698	1,000		2,600	10,200	8,537	451			22	
1907-08				1,698	1,000		2,600	10,200	8,537	451			22	
1908-09				1,698	1,000		2,600	10,200	8,537	451			22	
1909-10				1,698	1,000		2,600	10,200	8,537	451			22	
1910-11				1,698	1,000		2,600	10,200	8,537	451			22	
1911-12				1,698	1,000		2,600	10,200	8,537	451			22	
1912-13				1,698	1,000		2,600	10,200	8,537	451			22	
Total														

¹ To restore endowment (not included in totals).² Water mains and sewer.³ \$1500 cadet uniforms, \$125 sewers.⁴ Rent, President's house.⁵ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$3000 sewer,⁶ \$560 rent President's house.⁷ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$3000 sewer,⁸ \$560 rent President's house.⁹ Part for equipment.¹⁰ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house, \$14,883 deficiency June 30, 1899.¹¹ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹² \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹³ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹⁴ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹⁵ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹⁶ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹⁷ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹⁸ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.¹⁹ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²⁰ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²¹ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²² \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²³ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²⁴ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²⁵ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²⁶ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²⁷ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²⁸ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.²⁹ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.³⁰ \$2000 Farmers' Institutes, \$1800 salary State Veterinarian, \$300 rent President's house.

Grounds and Buildings.

THE College grounds and buildings, occupying an elevation at the western limits of the city of Manhattan, and facing toward the city, are beautiful in location. The grounds include an irregular plat in the midst of a fine farm, with orchard, vineyard and sample gardens attached, the whole being surrounded by durable stone walls. The grounds are tastefully laid out and extensively planted, according to



the design of a professional landscape-gardener, while well-graveled drives and good walks lead to the various buildings. All these are of the famed Manhattan limestone, of simple but neat styles of architecture, and admirably suited to their use. All recitation rooms are excellently lighted and ventilated, and are all heated by steam or hot water. A complete system of sewerage has been provided. The College owns 323 acres of land, valued at \$39,700, and leases 67 acres

additional. The greater portion of these 390 acres is devoted to experiments.

THE MAIN COLLEGE BUILDING, 152x250 feet in extreme dimensions, is arranged in three distinct structures, with connecting corridors. This building contains, in its two stories and basement, offices of the President and Secretary, cloak-rooms, studies, chapel, post-office, and offices and classrooms of the departments of drawing, music, physics and electrical engineering, mathematics, oratory, English, and printing. Cost, \$79,000. The value of equipment and apparatus in this building is as follows: Executive, \$5044; drawing, \$2699; music, \$1244; physics and electrical engineering, \$4366; mathematics, \$1679; oratory, \$45; English, \$68; printing, \$2590.

MECHANICS HALL contains the following rooms, forming a connected structure: Wood shop, two stories, 40x103 feet. The upper floor contains offices and classrooms for the department of mechanical engineering. The lower floor contains benches for 220 students, and complete set of wood-working machinery and tools. Machine shops, 40x80 feet; blacksmith shop, 40x50 feet; iron foundry, 40x50 feet; brass foundry, 16x30 feet; pipe-fitting room, 18x50 feet; engineering laboratory, 35x40 feet; power room, 35x40 feet; boiler room, 40x75 feet. Cost of buildings, \$21,800; value of equipment, \$36,348.

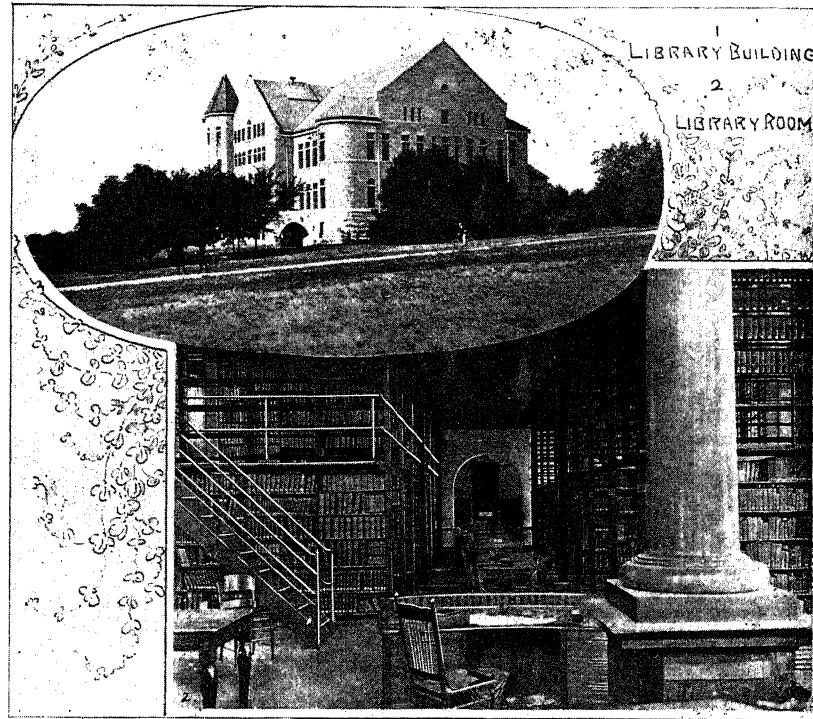
GYMNASIUM, one story, 35x110 and 46x75 feet of floor space, is in form of a cross. It contains a drill-room 43x71 feet, a large classroom, cloak-room, dressing-room, toilet-room, ten bath-rooms, and two offices. Cost, \$10,000. Value of equipment, \$349.

HORTICULTURAL HALL, 32x80 feet, is a one-story building with cellar, having museum, classroom, and storage, with greenhouses attached. Cost of building was \$4200; value of equipment and apparatus is \$18,879.

HORTICULTURAL LABORATORY contains offices, workroom, five propagating houses, and insectary. Cost, \$5000.

ARMORY, 46x96 feet, is a two-story building. This building, which has served many purposes, is now fitted below for an armory and drill-room and office of military department; also dressing-room and bath-room for the various athletic teams; and above are classrooms, laboratories, offices and museum of the veterinary department. Cost of building, \$11,250. Value of equipment and apparatus: Military, \$8341; veterinary, \$10,581.

LIBRARY AND AGRICULTURAL SCIENCE HALL is 100x140 feet, three and four stories high. This building provides permanent quarters for the library, with ample reading-rooms and offices, classrooms and laboratories for the departments of botany and entomology, a class-



room for the department of history and economics, general museum, and rooms for the various literary societies. Cost of building, \$57,750. Value of equipment and apparatus: Botany, \$13,281; history and economics, \$232; entomology, \$2947.

DOMESTIC SCIENCE HALL is 84x70 feet, two stories and basement. The first floor contains office, lecture-rooms and laboratories for the department of domestic science. The second floor is occupied by the department of domestic art. The basement is used by the Students' Coöperative Association, in which noon lunches are served, except on Sundays. Cost of building, \$15,000. Value of apparatus: Domestic science, \$1029; domestic art, \$693.

THE AGRICULTURAL HALL, 90x95 feet, with its two stories and basement, contains offices, classrooms and laboratories for the department of agriculture. It is well equipped with modern improved machinery for butter- and cheese-making, milk testing, etc. All the workrooms are lined with opalite tiling. Cost, \$25,000; equipment and apparatus, \$25,191.

THE FARM BARN is a double but connected stone structure, 50x75 feet and 48x96 feet, with an addition of sheds and experimental pens.

40x50 feet. A basement, having stalls for seventy-five head of cattle, silos, motor-room, and granaries, underlies the entire structure. Cost, \$10,831.

THE DAIRY BARN, 40x175 feet, will be fitted up with modern swinging stalls for eighty head of cows, arranged in two rows, with driveway between. Cost of building, \$3000.

THE HORTICULTURAL BARN is a stone building, containing store-room, granary, and stables for several horses. Cost, \$1000.

THE COLLEGE LIBRARY is one of the most important supplements to classroom instruction. It consists of 23,000 bound volumes and about 18,000 pamphlets. These books are mainly kept in a general library, but many volumes of technical character are withdrawn and held in departmental libraries. All of the books are indexed in card catalogues, which show their author, title, and to a large degree the details of their contents; also their location. Students are allowed free access to the shelves, a privilege and a source of culture that is given in perhaps no other library of its size in the country. Students may draw books for home use under simple and liberal regulations. The library is open daily, except on legal holidays, from seven A. M. to six P. M., and the librarian or an assistant is in constant attendance during this period to assist those who use the books. By all these means the library is utilized to the fullest extent and is of inestimable value.

The College subscribes for the leading literary, scientific and agricultural journals, while the principal daily and weekly papers of Kansas, and many from other states, are received in exchange for the College publications. All these are kept on file for the use of students and Faculty. The College has been designated as the depository of United States public documents for the fifth congressional district of Kansas, and 2500 volumes have already been received on this account. Value of books and equipment, \$48,566.

Objects.

This College now accomplishes the objects of its endowment in several ways :

First, It gives a substantial education to men and women. Such general information and discipline of mind and character as help to make intelligent and useful citizens are offered in all its departments, while the students are kept in sympathy with the callings of the people.

Second, It teaches the sciences applied to the various industries of farm, shop, and home. Chemistry, physics, botany, entomology, zoölogy and mechanics are made prominent means of education to quick observation and accurate judgment. Careful study of the minerals, plants and animals themselves illustrates and fixes the daily lessons. At the same time lessons in agriculture, horticulture, engineering and household economy show the application of science; and all are enforced by actual experiment.

Third, It trains in the elements of the arts themselves, and imparts such skill as to make the hands ready instruments of thoughtful brains. The drill of the shops, gardens, farm and household departments is made a part of the general education for usefulness, and insures a means of living to all who make good use of it. At the same time it preserves habits of industry and manual exertion, and cultivates a taste for rural and domestic pursuits.

Fourth, It seeks to extend the influence of knowledge in practical affairs beyond the College itself. For this purpose, farmers' institutes have been organized in nearly every county of the state, in which from one to three members of the Faculty share with the people in lectures, essays and discussions upon topics of most interest to farmers and their families. These institutes have brought the College into direct sympathy with the people and their work, so as to make possible a general dissemination of the truths presented. Members of the Faculty are also prominently connected with the state associations for the promotion of agriculture, horticulture, the natural sciences, and education in general. Correspondence as to farmers' institutes or any questions of practical interest in agriculture or related sciences is desired.

The *Industrialist*, published by the College and edited by the Faculty, gives a wide circulation to matters of interest in the College.

THE EXPERIMENT STATION.

The Agricultural Experiment Station of the College is organized and maintained under the provisions of what is known as the "Hatch

act," and is officially designated as "An act to establish agricultural experiment stations in connection with the colleges established in the several states under the provisions of an act approved July 2, 1862, and the acts supplementary thereto." This was enacted "in order to aid in acquiring and diffusing among the people of the United States useful and practical information on subjects connected with agriculture, and to promote scientific investigation and experiment respecting the principles and practice of agricultural science." The law specifies in detail "that it shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and waters; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaptation and value of grasses for forage-plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable."

The Experiment Station, so established, is an important feature of the College. The President of the College, with the professors of agriculture, botany, chemistry, horticulture and entomology, and veterinary science, form the Experiment Station Council, by the authority of which experiments are undertaken, and carried on in the several departments under the supervision of the professors. The heads of certain important departments of instruction in the College are thus also in charge of the several departments of investigation of the Station, and to a certain extent assistants serve in both capacities. The Experiment Station, therefore, is not definitely localized at the institution, but its work and property are more or less woven in with that of the College. The expenses of the Experiment Station work are separately accounted for, however, and its property is listed in separate inventories. While this arrangement involves some difficulties, it also possesses many advantages—advantages which are mutual. The College work profits by having the investigations of the Station going on alongside. The Station profits in that it thus obtains, without charge, the use of the College farm, buildings, heat, light, and use of various collections, museums, and in some cases apparatus. The expenses of the Experiment Station are met by an appropriation

by congress of \$15,000 per annum. The aims of the Station may be said to be twofold—those which lead to immediate returns, and those the object of which can be reached only after a series of years. Experiments of the greatest value are often of the latter kind, but if the work of the Station were limited to such, the public would feel that nothing is being accomplished. It is the intention of the Station force to make all of its experiments practical, in the sense that they lead to results which, indirectly if not directly, benefit the agricultural interests of the country.

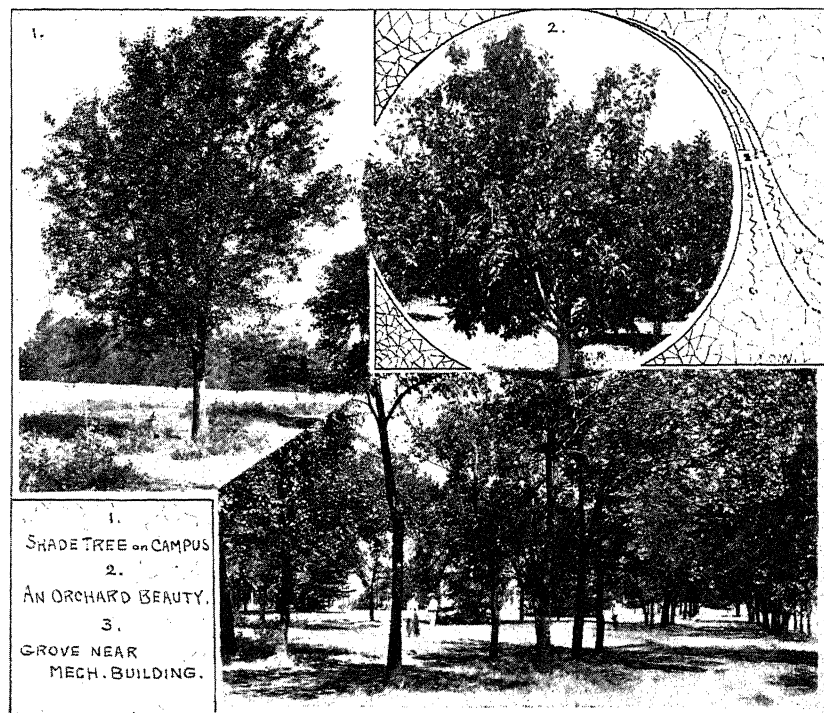
The Hatch act provides “that bulletins or reports of progress shall be published at least once in three months, one copy of which shall be sent to each newspaper in the states or territories in which they are respectively located, and to such individuals actually engaged in farming as may request the same, and as far as the means of the Station will permit.” The publications of the Station include annual reports, bulletins, and press bulletins.

Since 1889 the annual reports contain no details of experiments, but simply outlines of the work of the year in general and in the several departments, and including the financial statements required by law. These annual reports, not being of general interest, therefore, are printed in but small numbers, and sent to libraries and officials only, except on special request.

The bulletins are the means of communicating the results of the Station work directly to the farmers. They are issued in the quantities judged necessary to meet the demand. All investigations are described in them when completed, and they are sent to all on our mailing lists. During the history of the Station the number issued has averaged about eight per annum, and the total number of copies printed within the year ending April 1, 1901, was 145,000.

The press bulletins are issued in limited numbers and sent to the papers, to certain state and county officers, and to a considerable number of public or semi-public institutions. They are short, readable, and popular, but at the same time accurate, articles on subjects of current interest, and embodying observations and experiments of members of the Station staff. Extra copies of some of them are printed for use in answering inquiries.

Persons desiring to receive the Station bulletins are requested to address Agricultural Experiment Station, Manhattan, Kan. General correspondence in reference to the Station should be sent in the same way, but inquiries concerning any special line of investigation should be sent to the head of the department in charge of such work.



INDUSTRIAL TRAINING.

This institution is preëminently industrial in its aims, methods, and tendencies. While the pure sciences, mathematics and other studies are rigorously taught, there is constantly present a practical atmosphere which incites the student to an application of the principles taught, and thus lends interest and value to the work. In nearly every term of the four-year course the student gives one hour per day to industrial training of one kind or another. This awakens and deepens sympathy with industry and toil, impresses the student with the essential dignity of labor, thus educating toward the industries instead of away from them, and lays a good foundation for a life-work in industrial and technical lines. Even should students not all return to the farm, the shop, or to housewifery, the wider knowledge afforded them and the broader sympathies engendered cannot but redound to their good, and to the advantage of society at large and the industrial classes in particular.

Throughout the first year young men take their industrial in the shops. They thus get a familiarity with tools and methods which enables them to do the wood- and ironwork commonly needed on the farm, and which is useful to all everywhere. The young women take

sewing during the first year, and a certain amount of cooking practice. The utility of this needs no argument. After the first year there are differences in the industrial requirements corresponding to differences in the several courses of study. In the domestic science course the various lines of household art constitute almost the entire industrial work, floriculture being given one term and another being open to choice. In the mechanical engineering course shop work in one or another of its various kinds is required every term. In the agriculture course the industrials include practical instruction in the fields, orchards, gardens, and dairy, and in feeding. The general science course offers more latitude in choice of industrials after the second year. Young women may take sewing, cooking, printing, floriculture, or music. Young men may have woodwork, ironwork, dairying, farming, gardening, fruit-growing, or printing. The availability of these industrials depends somewhat on the season in some cases, so that not all are open each term. In addition to the above, a limited number of students are allowed typewriting as the industrial, upon recommendation of the head of a department having a machine.

The labor of students during assigned industrial time is not paid for, as its object is educational, and the student receives full value in the training afforded. In all the instruction in industrial lines special attention is given to making the courses systematic and progressive. Students desiring to give extra attention to such work are allowed every opportunity that the departments can afford. Many students acquire sufficient proficiency to be able to turn their skill to a financial advantage during the later terms of their courses, and all who apply themselves with any diligence obtain a training that cannot fail to be of great benefit to them in after-life. The work of the several industrials will be found described in detail under the individual headings.

EXTENDED COURSE.

Considering the entrance requirements of the institution, the four-year course of study is brief. Where practicable, students are advised to extend their course to five years. For students desiring to do this, additional work will be arranged in departments in which they may desire to specialize. Work done in the extended course may receive special mention on the diploma and be counted against requirements for the second degree.

SPECIAL COURSES.

Persons of suitable age or advancement, who desire to pursue such branches of study as are most directly related to agriculture or other industries, may select such studies, under the advice of the Faculty.

POSTGRADUATE COURSES.

Arrangements can be made for advanced study in the several departments at any time, and outlines of courses will be furnished on application. The electives of the extended course are open to graduates, and special opportunities will be given for investigation and research. Every facility for advancement in the several arts taught at the College will be afforded such students, though they are not required to pursue industrial training while in these courses.

DEGREES.

The degree of bachelor of science is conferred upon students who complete the full course of four years and sustain all the examinations. This degree entitles the holder to credit for studies pursued in any application for state teachers' certificate. (See Laws of 1893.)

Students who extend the course one full year will receive mention on the diploma of special proficiency in those lines of study which they have pursued as an elective for not less than three terms.

The degree of master of science is conferred in course upon graduates who comply with the following conditions:

1. Upon candidates resident at least one year, the degree may be conferred at the end of a two-year postgraduate course; upon non-resident candidates, the degree may be conferred at the end of a three-year postgraduate course; upon candidates who have taken a five-year extended course or its equivalent, it may be conferred at the end of a one-year postgraduate course.

2. Each candidate shall be required to take a definite course approved by the Faculty, and his studies are expected to bear upon the distinctive work of the institution.

3. Each candidate must present for consideration by the Faculty a satisfactory thesis, involving original research in the line of his major study, and shall deposit a perfect copy in the College library.

4. Application to the Faculty for sanction of the lines of study and research should be made as early as the 1st day of November.

5. The subject of the thesis must be settled upon as soon as the 1st day of January preceding the commencement at which the degree is expected.

Outlines of direction for study and research in various arts and sciences, with special adaptation to the wants and opportunities of individual applicants, will be furnished, at request, to all graduates; and professors in charge will gladly aid by correspondence in any researches undertaken.

The degree of master of science may be conferred upon the graduates of other colleges of like grade with our own, provided the applicant shall first satisfy the Faculty of his proficiency in the

industrial studies distinctive of this institution, on the following conditions:

1. The applicant for the master's degree must be a graduate of at least three years' standing, and a resident of Kansas.
2. His postgraduate study shall have been in line with that required of graduates of this College, as published in our catalogue.
3. He must make application for the degree on or before the 1st day of January preceding the granting of the same. The application must be accompanied with a statement of his course of study, the work upon which the claim for the degree is based, and the subject selected for his thesis.
4. By April 1, an abstract of the thesis must be submitted to the Faculty.
5. Before May 15, the applicant shall present himself for examination. The examination shall be thorough and extensive, and shall be conducted by a special committee of the Faculty.

COURSES OF STUDY.

With a view of providing for the wants of the various classes of students, the following courses of study are offered:

1. Four-year courses, each leading to the degree of bachelor of science: (*a*) General science; (*b*) agriculture; (*c*) domestic science; (*d*) mechanical engineering; (*e*) electrical engineering.
2. Short courses in (*a*) dairying, (*b*) domestic science, (*c*) agriculture and mechanics, (*d*) horticulture and mechanics.
3. Apprentice courses in the shops and in the printing-office.

Full explanations of the several courses, and of the studies included in them, will be found under the proper headings, and a general view of the four-year courses is given on the following pages.

ALL COURSES.

This and the three following pages give a general view of the four-year courses of study. The first year is the same for all students, excepting that the young men take military drill, agriculture, and shop work, while the young women take calisthenics, household economics, and sewing.

Figures following studies show class hours per week. Subjects in *italic type* require no study outside of class. Military drill is optional for young men of the third and fourth years. In the fourth year certain terms are open for electives in the science course and domestic science course. The electives are chosen under the direction of the Faculty. In each case, the electives for the three terms are expected to be in the same line as nearly as possible. The following list is announced, and others will be provided as demanded, in so far as the teaching force available will permit:

*** Music by special permission at any time during the course.**

For outline of instruction, see page 42 *et seq.*

SECOND YEAR. COURSES OF STUDY—Continued.

AGRICULTURE.	DOMESTIC SCIENCE.	GENERAL SCIENCE.	MECH. ENGINEERING.	ELECT. ENGINEERING.
FALL TERM.				
Chemistry..... 5	Chemistry..... 5	Chemistry..... 5	Chemistry..... 5	Chemistry..... 5
Laboratory..... 2½	Laboratory..... 2½	Laboratory..... 2½	Laboratory..... 2½	Laboratory..... 2½
Geometry II..... 5	Geometry II..... 5	Geometry II..... 5	Geometry II..... 5	Geometry II..... 5
Horticulture..... 5	Horticulture..... 5	Horticulture..... 5	Projection Drawing..... 5	Projection Drawing..... 5
Industrial..... 5	Industrial..... 5	Industrial..... 5	Oratory I..... 5	Oratory I..... 5
Horticulture..... 5	Catisthenes..... 5	Military Drill or	Shop..... 5	Shop..... 5
Oratory I..... 5	Music.*	Catisthenes..... 5	Military Drill..... 5	Military Drill..... 5
Military Drill..... 5	Music.*	Music.*	Music.*	Music.*
WINTER TERM.				
Organic Chemistry..... 3	Organic Chemistry..... 3	Organic Chemistry..... 3	Mechanics..... 5	Mechanics..... 5
Chemistry of Metals..... 2	Chemistry of Metals..... 2	Chemistry of Metals..... 2	Chemistry of Metals..... 2	Chemistry of Metals..... 2
Laboratory..... 2½	Laboratory..... 2½	Laboratory..... 2½	Laboratory..... 2½	Laboratory..... 2½
Trigonometry..... 5	Trigonometry or	Trigonometry..... 5	Trigonometry..... 5	Trigonometry..... 5
Dairying..... 5	American Literature..... 5	Physiology..... 5	Projection Drawing..... 5	Projection Drawing..... 5
Laboratory..... 10	Oratory I..... 2 or 3	Oratory I..... 2 or 3	Shop and Lectures..... 10	Shop and Lectures..... 10
Military Science..... 3	Dressmaking..... 5	Industrial..... 5	Military Science..... 3	Military Science..... 3
	Laboratory..... 5	Military Science..... 3		
	Catisthenes..... 5	or Catisthenes..... 5		
SPRING TERM.				
Analytical Chemistry..... 2½	Analytical Chemistry..... 2½	Analytical Chemistry..... 2½	Analytical Chemistry..... 2½	Analytical Chemistry..... 2½
Laboratory..... 7½	Laboratory..... 7½	Laboratory..... 7½	Laboratory..... 7½	Laboratory..... 7½
Entomology..... 5	Entomology..... 5	Entomology..... 5	Heat..... 3	Heat..... 3
Tillage and Fertility..... 5	Oratory II or Music I. 2 or 3	Oratory II..... 2 or 3	Hydraulics..... 2	Hydraulics..... 2
Physiology..... 5	Physiology..... 5	Higher Algebra..... 5	Higher Algebra..... 5	Higher Algebra..... 5
Surveying..... 2	Catisthenes..... 5	Surveying..... 2	Axonometric Drawing..... 5	Axonometric Drawing..... 5
Military Drill..... 5		Military Drill or	Shop..... 5	Shop..... 5
		Catisthenes..... 5	Military Drill..... 5	Military Drill..... 5

For outline of instruction, see page 42 et seq.

THIRD YEAR. COURSES OF STUDY—Continued.

FALL TERM.	THIRD YEAR. COURSES OF STUDY—Continued.			
	AGRICULTURE.	DOMESTIC SCIENCE.	GENERAL SCIENCE.	ELECT. ENGINEERING.
	Rhetoric 5 General History 5 Agricultural Chemistry and Soil Physics 5 Hygiene of Farm Animals 3 <i>Agricultural Mechanics</i> , 5	Rhetoric 5 General History 5 Chemistry of Cookery 5 Domestic Science I 2 <i>Laboratory</i> 5 <i>Oratory III or Music II</i> , 5	Rhetoric 5 General History 5 Projection Drawing 5 Zoology 2½ <i>Laboratory</i> 7½ <i>Industrial</i> 5	Rhetoric 5 General History 5 Analytical Geometry 5 Descriptive Geometry 5 <i>Shop and Lectures</i> 7½
	Nineteenth Cent. Hist. 5 Civics 5 Chemistry of Foods (½ t.), } Stock Feeding (½ t.) 5 Zoology 2½ <i>Laboratory</i> 7½ <i>Industrial, Horticulture</i> , 5	Nineteenth Cent. Hist. 5 Civics 5 Chemistry of Foods (½ t.), } Home Architecture (½ t.), } Domestic Science II 2 <i>Laboratory</i> 5 <i>Floriculture</i> 5	Nineteenth Cent. Hist. 5 Civics 5 Calculus 5 <i>Oratory II</i> 5 <i>Mechanical Drawing</i> 5 <i>Graphic Statics</i> 2½ <i>Shop</i> 5	Nineteenth Cent. Hist. 5 Civics 5 Calculus 5 <i>Oratory II</i> 5 <i>Mechanical Drawing</i> 5 <i>Graphic Statics</i> 2½ <i>Shop</i> 5
WINTER TERM.	Economic Principles 5 Geology 5 Horticulture 5 Stock Feeding 5 <i>Oratory II</i> 5	Economic Principles 5 Geology 5 Zoology 2½ <i>Laboratory</i> 7½ Domestic Science III 2 <i>Laboratory</i> 5	Economic Principles 5 Calculus 5 Bacteriology 4 <i>Laboratory</i> 2½ Perspective and Sketching 2½ <i>Industrial</i> 5	Economic Principles 5 Calculus 5 Principles of Mechanism 5 Perspective and Sketching 2½ <i>Machine Design</i> 5 <i>Shop</i> 7½
SPRING TERM.				

For outline of instruction, see page 42 et seq.

FOURTH YEAR. COURSES OF STUDY—Continued.

	AGRICULTURE.	DOMESTIC SCIENCE.	GENERAL SCIENCE.	MECH. ENGINEERING.	ELECT. ENGINEERING.
FALL TERM.	Physics I..... 5 History of Industries... 5 Bacteriology..... 4 Laboratory..... 2½ Comparative Anatomy.. 5 Industrial..... 5	Physics I..... 5 History of Industries... 5 Bacteriology..... 4 Laboratory..... 2½ Oratory IV or Music..... 3 Therapeutic Cookery.... 2 Laboratory..... 5	Physics II..... 5 History of Industries... 5 Elective..... 5 Oratory IV..... 5 Industrial..... 5	Electricity and Magnetism..... 5 History of Industries... 5 Mechanics of Materials..... 5 Electrical Measurements... 5 Engineering Design..... 5 Shop..... 5	Electricity and Magnetism..... 5 History of Industries... 5 Mechanics of Materials..... 5 Electrical Measurements... 5 Engineering Design..... 5 Shop..... 5
WINTER TERM.	Physics II..... 5 Horticulture..... 5 Physiological Botany... 5 Laboratory..... 5 Veterinary Science..... 5	Physics II..... 5 English Literature I..... 5 Physiological Botany..... 5 Laboratory..... 5 Emergency Lectures..... 2½ Special Physiology..... 2½	Physics II..... 5 English Literature I..... 5 Physiological Botany..... 5 Laboratory..... 5 Elective..... 5	Sound and Light..... 5 Applied Mechanics..... 5 Engineering Power Plants..... 5 Eng. Laboratory..... 5 Machine Design..... 5 Shop..... 5	Sound and Light..... 5 Applied Mechanics..... 5 Dynamo-electric Machines... 5 Electrical Laboratory..... 5 Machine Design..... 5 Shop..... 5
SPRING TERM.	English Literature..... 5 Breeds and Breeding.... 5 Plant Diseases and Plant Breeding..... 5 Agricultural Economics, 5 Thesis.	English Literature II..... 5 Psychology..... 5 Elective..... 5 Demonstrations..... 5 Thesis.	English Literature..... 5 Applied Mechanics..... 5 Thermodynamics..... 5 Machine Design..... 10 Thesis.	English Literature..... 5 Applied Mechanics..... 5 Thermodynamics..... 5 Applied Electricity..... 5 Electric Power Transmis- sion..... 5 Thesis.	

For outline of instruction, see page 42 *et seq.*

General Science Course.

First column of figures indicates hours per week.

Second column shows page in this catalogue where full description may be found.

First Year.**FALL TERM:**

Algebra II.....	5	57
English Readings I.....	5	52
Elementary Botany.....	5	44
Hygiene.....	1	48
Free-hand Drawing.....	2½	50
Shop.....	5	58
or Sewing I.....	5	50
Military Drill.....	4	62
or Calisthenics.....	4	66

WINTER TERM:

Algebra III.....	5	57
English Readings II.....	5	53
Agriculture.....	5	42
or Household Economics.....	5	48
Geometrical Drawing.....	2½	50
Shop.....	5	58
or Sewing II.....	5	50
Military Drill.....	2	62
and Tactics.....	1	62
or Calisthenics.....	5	66

SPRING TERM:

Geometry I.....	5	57
English Themes.....	5	53
Elementary Physics.....	5	66
Object Drawing III.....	2½	50
Shop.....	5	58
or Sewing.....	5	50
Military Drill.....	5	62
or Calisthenics.....	5	66

Second Year.**FALL TERM:**

Chemistry.....	5	46
Chemical Laboratory.....	2½	46
Geometry II.....	5	57
Horticulture.....	5	55
Industrial Elective.....	5	—
Military Drill.....	5	62
or Calisthenics.....	5	66

WINTER TERM:

Organic Chemistry.....	3	46
Chemistry of Metals.....	2	46
Chemical Laboratory.....	2½	46
Trigonometry.....	5	57
Physiology.....	5	71
Oratory I.....	2 or 3	65
Industrial Elective.....	5	—
Military Science.....	3	62
or Calisthenics.....	5	66

SPRING TERM:

Analytical Chemistry.....	2½	47
Chemical Laboratory.....	7½	47
Entomology.....	5	56
Oratory II.....	2 or 3	65
Higher Algebra.....	5	58
Surveying.....	2	57
Military Drill.....	5	62
or Calisthenics.....	5	66

Third Year.**FALL TERM:**

Rhetoric.....	5	53
General History.....	5	55
Projection Drawing.....	5	51
Zoölogy.....	2½	71
Zoology Laboratory.....	7½	71
Industrial Elective.....	5	—

WINTER TERM:

Nineteenth Century History..	5	55
Civics.....	5	55
Oratory III, 1st half.....	5	65
Chemistry of Foods, 2d half..	5	47
Logic.....	5	71
Industrial Elective.....	5	—

SPRING TERM:

Economic Principles.....	5	55
Geology.....	5	54
Bacteriology.....	4	69
Bacteriology Laboratory..	2½	69
Perspective and Sketching..	5	51
Industrial Elective.....	5	—

Fourth Year.**FALL TERM:**

Physics.....	5	66
History of Industries.....	5	55
Elective.....	5	28
Oratory IV.....	5	65
Industrial Elective.....	5	—

WINTER TERM:

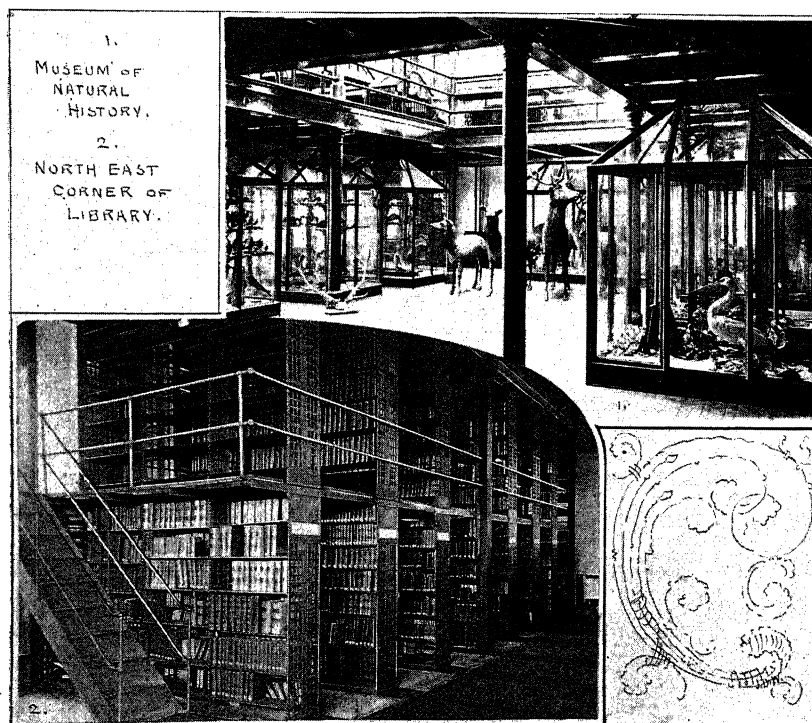
Physics.....	5	66
English Literature.....	5	53
Physiological Botany.....	5	44
Botany Laboratory.....	5	44
Elective.....	5	28

SPRING TERM:

English Literature.....	5	53
Psychology.....	5	71
Elective.....	5	28
Object Drawing.....	5	51
Thesis.....	—	—

General Science Course.

This course is designed to meet the wants of those who seek to obtain a sound and liberal education through the study of the mathematical, physical and natural sciences, English language, and history. It is well adapted to the student who has not yet decided upon his life-work, or who wishes to make this a foundation for further study. It is based on the principle of "a general knowledge of all things before a special knowledge of a few." It will be well worth one's time to take this course before beginning the work of a technical or professional course. The industrial work is a feature of this course, as of all others, and after the first year it is largely elective. This gives ample opportunity to specialize along any line of work, should the student desire. The elective continuing through the fourth year gives opportunity for some special lines, as follows: Young men may take analytical geometry, differential and integral calculus with the third-year engineering students, and young women may take the three terms in domestic science with the third-year women of the domestic science course. Work in other departments may be elected, as: Agriculture, chemistry, physics, horticulture and entomology, veterinary science, and German. In each case, the electives for three terms are expected to be in the same line as nearly as possible. Other electives will be provided as demanded, as far as the teaching force available will permit. Music is optional throughout the four years, and young women are allowed to take it as an industrial after the first year, by permission of the Faculty



Agriculture Course.

First column of figures indicates hours per week.

Second column shows page in this catalogue where full description may be found.

First Year.

FALL TERM:

Algebra II.....	5	57
English Readings I.....	5	52
Elementary Botany.....	5	44
Hygiene.....	1	70
<i>Free-hand Drawing</i>	2½	50
<i>Shop</i>	5	58
<i>Military Drill</i>	4	62

WINTER TERM:

Algebra III.....	5	57
English Readings II.....	5	53
Agriculture.....	5	42
Geometrical Drawing.....	2½	50
<i>Shop</i>	5	58
<i>Military Drill</i>	2	62
Tactics.....	1	62

SPRING TERM:

Geometry I.....	5	57
English Themes.....	5	53
Elementary Physics.....	5	66
<i>Object Drawing</i>	2½	50
<i>Shop</i>	5	58
<i>Military Drill</i>	5	62

Second Year.

FALL TERM:

Chemistry.....	5	46
<i>Chemical Laboratory</i>	2½	46
Geometry II.....	5	57
Horticulture.....	5	55
<i>Industrial, Horticulture</i>	5	57
<i>Oratory I</i>	5	65
<i>Military Drill</i>	5	62

WINTER TERM:

Organic Chemistry.....	3	46
Chemistry of Metals.....	2	46
<i>Chemical Laboratory</i>	2½	46
Trigonometry.....	5	57
Dairying.....	5	42
<i>Dairy Laboratory</i>	10	42
Military Science.....	3	62

SPRING TERM:

Analytical Chemistry.....	2½	47
<i>Chemical Laboratory</i>	7½	47
Entomology.....	5	56
Tillage and Fertility.....	5	42
Physiology.....	5	71
<i>Surveying</i>	2	57
<i>Military Drill</i>	5	62

Third Year.

FALL TERM:

Rhetoric.....	5	53
General History.....	5	55
Agricultural Chemistry and Soil Physics.....	5	47
Hygiene of Farm Animals....	3	69
<i>Agricultural Mechanics</i>	5	59

WINTER TERM:

Nineteenth Century History,	5	55
Civics.....	5	55
Chemistry of Foods, 1st half,	5	47
Stock Feeding, 2d half.....	5	42
Zoology.....	2½	71
<i>Zoology Laboratory</i>	7½	71
<i>Industrial, Horticulture</i> ...	5	57

SPRING TERM:

Economic Principles.....	5	55
Geology.....	5	54
Horticulture.....	5	55
Stock Feeding.....	5	42
<i>Oratory II</i>	5	65

Fourth Year.

FALL TERM:

Physics.....	5	66
History of Industries.....	5	55
Bacteriology.....	4	69
<i>Bacteriology Laboratory</i> ..	2½	69
Comparative Anatomy.....	5	70
<i>Industrial</i>	5	—

WINTER TERM:

Physics.....	5	66
Horticulture.....	5	56
Physiological Botany.....	5	44
<i>Botany Laboratory</i>	5	44
Veterinary Science.....	5	70

SPRING TERM:

English Literature.....	5	53
Breeds and Breeding.....	5	42
Plant Diseases and Plant Breeding.....	5	44
Agricultural Economics.....	5	43
Thesis.....	—	—

Agriculture Course.

The leading feature of the four-year agriculture course is the training offered in methods of farm production. Instruction is given in tillage, crop production, stock feeding and breeding, dairying, farm management, orcharding, small-fruit culture, and gardening. Insect life is considered in its relations to the farm, orchard, and garden, including a study of beneficial and injurious insects, with practical methods of combating the latter; and the laws of disease and health are studied, with the causes of diseases of farm animals and methods of avoiding and combating them. Work is required on the farm, and in the orchards and gardens, which will familiarize the student with the best method of conducting operations in these lines; and taken with this work is a study of the results secured by the College in crop production, fruit-raising, gardening, and feeding for beef, milk, and pork. Three terms of work are given in the carpenter and blacksmith shops, that the student may learn to handle tools and be able to make the common repairs needed on the farm.

Closely connected with agriculture are the sciences upon which successful farm practices are based. Bacteriology is taught, that the student may understand the conditions necessary for promoting the growth of bacteria which add to the fertility of the soil and those which improve the quality of dairy products; and the conditions necessary to prevent the growth of bacteria which exhaust the soil, cause losses in manures, injure dairy products, and bring disease. The laws of plant growth are taught in botany, that the farmer may through their aid grow larger and better crops. An understanding of the laws of physics enables the farmer to store moisture and to reduce the loss of water from the soil by evaporation, so that he can produce crops in dry years. A knowledge of chemistry applied to farm work secures richer soil, better yields, cheaper and greater gain in feeding, and better quality of farm products. The fertility of our new lands has been produced by forces which have been at work for countless ages. A knowledge of the workings of these forces, as taught in geology, helps the farmer to save the fertility of his fields until used for crops and to render available the immense food stores locked up in the soil.

A farmer should be an influential citizen as well as a skilful producer. For this reason, in the agriculture course instruction is given in literature and language, political and economic science, oratory, mathematics, drawing, and music. Such training enables the farmer to take part and become an influential factor in social and public work. Young men securing an education such as is afforded in this course do not leave the farm, but become enthusiastic and successful workers, competent either to manage farms of their own or to superintend farms for others.

Domestic Science Course.

First column of figures indicates hours per week.

Second column shows page in this catalogue where full description may be found.

First Year.**FALL TERM:**

Algebra II.....	5	57
English Readings I.....	5	52
Elementary Botany.....	5	44
Hygiene.....	1	48
Free-hand Drawing.....	2½	50
Sewing I.....	5	50
Calisthenics.....	4	66

WINTER TERM:

Algebra III.....	5	57
English Readings II.....	5	53
Household Economics.....	5	48
Geometrical Drawing.....	2½	50
Sewing II.....	5	50
Calisthenics.....	5	66

SPRING TERM:

Geometry I.....	5	57
English Themes.....	5	53
Elementary Physics.....	5	66
Object Drawing.....	2½	50
Sewing III.....	5	50
Calisthenics.....	5	66

Second Year.**FALL TERM:**

Chemistry.....	5	46
Chemical Laboratory.....	2½	46
Geometry II.....	5	57
Horticulture.....	5	55
Industrial.....	5	—
Calisthenics.....	5	66

WINTER TERM:

Organic Chemistry.....	3	46
Chemistry of Metals.....	2	46
Chemical Laboratory.....	2½	46
Trigonometry.....	5	57
or American Literature.....	5	53
Oratory I.....	2 or 3	65
Dressmaking.....	5	50
Dressmaking Laboratory..	5	50
Calisthenics.....	5	66

SPRING TERM:

Analytical Chemistry.....	2½	47
Chemical Laboratory.....	7½	47
Entomology.....	5	56
Oratory II or Music I..	2 or 3	65
Physiology.....	5	71
Calisthenics.....	5	66

Third Year.**FALL TERM:**

Rhetoric.....	5	53
General History.....	5	55
Chemistry of Cookery.....	5	48
Domestic Science I.....	2	48
Dom. Science Laboratory..	5	48
Oratory III or Music II..	5	65

WINTER TERM:

Nineteenth Century History,	5	55
Civics.....	5	55
Chemistry of Foods, 1st half,	5	47
Home Architecture, 2d half..	5	51
Domestic Science II.....	2	48
Dom. Science Laboratory..	5	48
Floriculture.....	5	56

SPRING TERM:

Economic Principles.....	5	55
Geology.....	5	54
Zoölogy.....	2½	71
Zoology Laboratory.....	7½	71
Domestic Science III.....	2	48
Dom. Science Laboratory..	5	48

Fourth Year.**FALL TERM:**

Physics.....	5	66
History of Industries.....	5	55
Bacteriology.....	4	69
Bacteriology Laboratory..	2½	69
Oratory IV or Music III.....	3	65
Therapeutic Cookery.....	2	48
Dom. Science Laboratory..	5	48

WINTER TERM:

Physics.....	5	66
English Literature.....	5	53
Physiological Botany.....	5	44
Botany Laboratory.....	5	44
Emergency Lectures.....	2½	48
Special Physiology.....	2½	48

SPRING TERM:

English Literature.....	5	53
Psychology.....	5	71
Elective.....	5	28
Demonstrations.....	5	49
Thesis.....	—	—

Domestic Science Course.

The aim of the Domestic Science course is both specific and general. Technically it is an application of the sciences of bacteriology to the study of home sanitation and hygiene, of physiology and chemistry to the composition of foods and their effects, of physics as applied to heating and lighting. These sciences necessarily, therefore, underlie the successful and intelligent conduct of the home, whether it be large or small, and must be included in any well-arranged course of domestic science. In the kitchen laboratory a standard system of measurement is taught, and constant emphasis is placed upon neatness, accuracy and economy in the handling of the material and utensils. The instruction in domestic art includes all the various kinds of hand-sewing, the making of plain garments, and a complete system of dressmaking. Thus, while the course is based upon studies of a thoroughly scientific nature, the industrial features characteristic of the College are made highly practical and are continued throughout the course.

The work prescribed during the first three years is designed to prepare young women to be skilful and competent housekeepers, but the three professional studies offered in the fourth year, therapeutic cookery, emergency lectures, and demonstrations, not only seek to perfect the student in all the demands that are made upon the housewife, but are designed primarily to provide thorough and adequate training to young women who desire to become specialists and teachers.

But, while the domestic science course emphasizes, primarily, the practical and material side of life, it does not stop here. To the end that well-rounded culture may be secured, studies are offered in this course in English, history, economics, psychology, and oratory. The girls are constantly reminded that life is not all drudgery; that technical knowledge and scientific skill, even, fail to include the full meaning of education in its highest sense. They are taught that any training that fails to develop, harmoniously, body, mind, and spirit, is inadequate and incomplete. They are brought face to face with ideals as well as with actualities; and are made to see that, while skilful labor is the crowning dignity of life, grace, refinement and self-poise are the highest ingredients of true service.

Mechanical Engineering Course.

First column of figures indicates hours per week.

Second column shows page in catalogue where full descriptions may be found.

First Year.**FALL TERM:**

Algebra II.....	5	57
English Readings I.....	5	52
Elementary Botany.....	5	44
Hygiene.....	1	70
Free-hand Drawing.....	2½	50
Shop.....	5	58
Military Drill.....	4	62

WINTER TERM:

Algebra III.....	5	57
English Readings II.....	5	53
Agriculture.....	5	42
Geometrical Drawing.....	2½	50
Shop.....	5	58
Military Drill.....	2	62
Tactics.....	1	62

SPRING TERM:

Geometry I.....	5	57
English Themes.....	5	53
Elementary Physics.....	5	66
Object Drawing.....	2½	50
Shop.....	5	58
Military Drill.....	5	62

Second Year.**FALL TERM:**

Chemistry.....	5	46
Chemical Laboratory.....	2½	46
Geometry II.....	5	57
Projection Drawing.....	5	50
Oratory I.....	5	65
Shop.....	5	58
Military Drill.....	5	62

WINTER TERM:

Mechanics.....	5	58
Chemistry of Metals.....	2	46
Chemical Laboratory.....	2½	46
Trigonometry.....	5	57
Projection Drawing.....	5	51
Shop and Lectures.....	10	59
Military Science.....	3	62

SPRING TERM:

Analytical Chemistry.....	2½	47
Chemical Laboratory.....	7½	47
Heat.....	3	66
Hydraulics.....	2	58
Higher Algebra.....	5	58
Axonometric Drawing.....	5	51
Shop.....	5	59
Military Drill.....	5	62

Third Year.**FALL TERM:**

Rhetoric.....	5	53
General History.....	5	55
Analytical Geometry.....	5	58
Descriptive Geometry.....	5	51
Shop and Lectures.....	7½	60

WINTER TERM:

Nineteenth Century History.....	5	55
Civics.....	5	55
Calculus.....	5	58
Oratory II.....	5	65
Mechanical Drawing.....	5	59
Graphic Statics.....	2½	59
Shop.....	5	60

SPRING TERM:

Economic Principles.....	5	55
Calculus.....	5	58
Principles of Mechanism.....	5	59
Perspective and Sketching.....	2½	51
Machine Design.....	5	60
Shop.....	7½	60

Fourth Year.**FALL TERM:**

Electricity and Magnetism.....	5	66
History of Industries.....	5	65
Mechanics of Materials.....	5	60
Engineering Laboratory.....	5	60
Engineering Design.....	5	60
Shop.....	5	60

WINTER TERM:

Sound and Light.....	5	66
Applied Mechanics.....	5	60
Engineering Power Plants.....	5	60
Engineering Laboratory.....	5	60
Machine Design.....	5	60
Shop.....	5	60

SPRING TERM:

English Literature.....	5	53
Applied Mechanics.....	5	60
Thermodynamics.....	5	60
Machine Design.....	10	60
Thesis.....	-	-

Mechanical Engineering Course.

This course offers four years' training in mechanical engineering subjects, and its object is to fit young men for responsible positions in that profession. It prepares for the successful management of machinery and manufacturing establishments, the designing, building and erection of machinery, superintendence of construction, etc. Though the work is largely technical, general studies of a broadening character are not excluded. The course includes instruction by text-book, lecture, laboratory, and workshop practice, and is especially based on mathematics, pure and applied mechanics, physics, chemistry, machine design, structural design, and steam engineering.

The course of study has been laid out with the aim of securing a judicious mixture of theory and practice, such as will not only give the student the technical skill required for engineering operations, but also a broad grasp of the fundamental principles of his profession. The advantages of combining a practical application of principles with theoretical instruction at the time these principles are being impressed by classroom work is well known. The shop work, being purely educational in its character, is so arranged that each student can make as rapid advancement as possible. Instruction is given by skilled workmen, and the work carried on is of the practical character, being, in fact, the building of lathes, engines, drills and machinery for the market and the department. In all shop practice the students work from blue-prints, thus learning to read drawings readily and supplementing the work of the drawing department.

Based upon the fundamental principle that laboratory and shop work, combined with technical training, constitute one of the most important features of engineering education, the course on opposite page is offered.

Electrical Engineering Course.

First column of figures indicates hours per week.

Second column shows page in this catalogue where full description may be found.

First Year.**FALL TERM:**

Algebra II.....	5	57
English Readings I.....	5	52
Elementary Botany.....	5	44
Hygiene.....	1	70
Free-hand Drawing.....	2½	50
Shop.....	5	58
Military Drill.....	4	62

WINTER TERM:

Algebra III.....	5	57
English Readings II.....	5	53
Agriculture.....	5	42
Geometrical Drawing.....	2½	50
Shop.....	5	58
Military Drill.....	2	62
and Tactics.....	1	62

SPRING TERM:

Geometry I.....	5	57
English Themes.....	5	53
Elementary Physics.....	5	66
Object Drawing.....	2½	50
Shop.....	5	58
Military Drill.....	5	62

Second Year.**FALL TERM:**

Chemistry.....	5	46
Chemical Laboratory.....	2½	46
Geometry II.....	5	57
Projection Drawing.....	5	50
Oratory I.....	5	65
Shop.....	5	58
Military Drill.....	5	62

WINTER TERM:

Mechanics.....	5	58
Chemistry of Metals.....	2	46
Chemical Laboratory.....	2½	46
Trigonometry.....	5	57
Projection Drawing.....	5	51
Shop and Lectures.....	10	59
Military Science.....	3	62

SPRING TERM:

Analytical Chemistry.....	2½	47
Chemical Laboratory.....	7½	47
Heat.....	3	66
Hydraulics.....	2	58
Higher Algebra.....	5	58
Axonometric Drawing.....	5	51
Shop.....	5	59
Military Drill.....	5	62

Third Year.**FALL TERM:**

Rhetoric.....	5	53
General History.....	5	55
Analytical Geometry.....	5	58
Descriptive Geometry.....	5	51
Shop and Lectures.....	7½	60

WINTER TERM:

Nineteenth Century History..	5	55
Civics.....	5	55
Calculus.....	5	58
Oratory II.....	5	65
Mechanical Drawing.....	5	59
Graphic Statics.....	2½	59
Shop.....	5	60

SPRING TERM:

Economic Principles.....	5	55
Calculus.....	5	58
Principles of Mechanism....	5	59
Perspective and Sketching...	2½	51
Machine Design.....	5	60
Shop.....	7½	60

Fourth Year.**FALL TERM:**

Electricity and Magnetism...	5	66
History of Industries.....	5	55
Mechanics of Materials.....	5	60
Electrical Measurements...	5	66
Engineering Design.....	5	60
Shop.....	5	60

WINTER TERM:

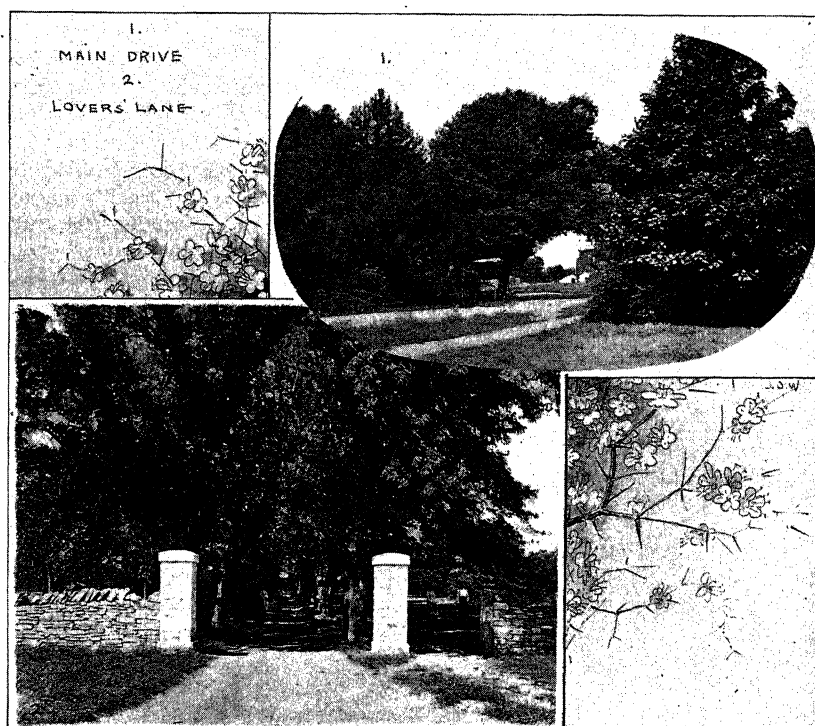
Sound and Light.....	5	66
Applied Mechanics.....	5	60
Dynamo-electric Machines...	5	67
Electrical Laboratory.....	5	67
Machine Design.....	5	67
Shop.....	5	60

SPRING TERM:

English Literature.....	5	53
Applied Mechanics.....	5	60
Thermodynamics.....	5	60
Electric Power Transmission,	5	67
Applied Electricity.....	5	67
Thesis.....	-	-

Electrical Engineering Course.

This course is arranged to supply the demand for men who have a practical knowledge of electricity, as well as a thorough knowledge of the principles and laws governing the forces and phenomena with which they have to deal. The applications of electricity are broadening out so rapidly by discovery and invention and by increased commercial applications, that new facts are to be met with almost daily. To meet these demands, the student should be well grounded in all the branches underlying his profession. This course is therefore made strong in mathematical and physical sciences. A well-equipped electrical engineer should also be a mechanical engineer, and must have some training in the principles of steam and hydraulic engineering as well as heat, plumbing, etc. Drawing, machine design, and mechanics of machinery, together with shop practice, occupy considerable portion of the time of the student. Some general-culture studies are offered in history and economics, oratory, and English. It is believed that this course will give a broad general training, with sufficient technical knowledge to meet the needs of a practical engineer.



Outline of Instruction.

Agriculture.

No. 1 is required of all young men; the other numbers in the agriculture course only.

1. **First Principles of Agriculture.** First year, winter term. Treats of soils, their contents, texture, moisture, tillage, and enrichment; the farm plant, its office, propagation, growth, and care; the animal, its life, feed, and management. Five hours per week. Text-book, Bailey's Principles of Agriculture. Lectures.

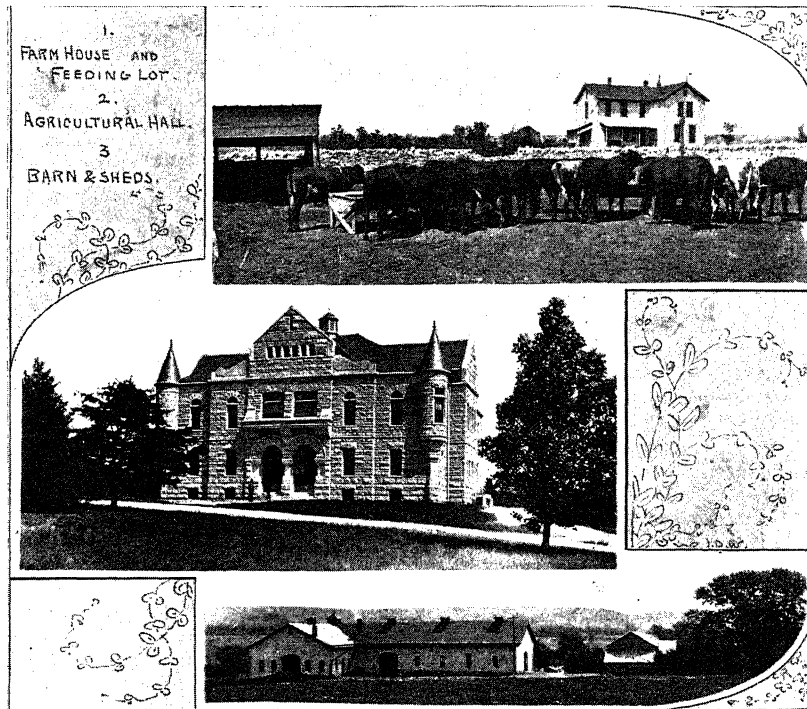
2. **Dairying.** Second year, winter term. Milk—its secretion, nature, and composition; cause and conditions influencing the quality and quantity of milk; handling of the milk for the market and for butter-making; creaming of milk by gravity methods and by the separator; cream ripening; making and marketing butter. Five hours per week. Text-book, Wing's Milk and its Products. Lectures.

3. **Dairy Industrial.** Second year, winter term. Class work will be supplemented by work in the dairy room, where students will be given practice in running the hand separator, ripening and churning cream, washing, salting, working, printing and packing butter, and care of dairy utensils and machines; analyzing, by the Babcock method, milk, cream, skim-milk, and buttermilk. Ten hours per week.

4. **Tillage and Fertility.** Second year, spring term. The management of the soil for maintaining and increasing its productivity, with special study of conservation of moisture. Includes a study of the nature, functions, texture and washing of soils, with the amount and availability of plant-food in soils; practical methods of rendering more plant-food available; plows and plowing, and other implements and methods of tillage; the conservation of soil moisture; farm manures; nitrification; clover crops, fallows, and improvement of soils by clover and alfalfa; rotations; selection of seed; methods of planting; treatment after planting and harvesting of grain, grass, root and forage crops; and special treatment. Five hours per week. Text-book, Robert's Fertility of the Land. Lectures.

5. **Stock Feeding.** Third year, winter term, half study; spring term, full study. The properties of feed stuffs, and their combination to secure good results at least cost with products having the desired qualities; effect of feeds on quality of products; preparation of feeds; methods of feeding; care and shelter of farm animals; construction of farm buildings and appliances to secure best returns from feed and for saving labor; study of experimental work in stock feeding. Five hours per week. Text-book, Henry's Feeds and Feeding. Lectures.

6. **Breeds and Breeding.** Third year, spring term. History and characteristics of the breeds of live stock, and their adaptability to Kansas conditions; laws of heredity, atavism; law of correlation; variation; conditions affecting fecundity; in-and-in breeding and cross-breeding; form as an index to qualities; selection and judging of live stock; compiling pedigrees. Five hours per week. Text-book, Miles's Stock Breeding. Lectures.



7. **Agricultural Economics.** Fourth year, spring term. Selection, equipment and management of the farm; farm labor, buildings, and machinery; field and feeding experiments; study of markets for farm products; agricultural history. Five hours per week. Lectures. Library references.

MEANS OF ILLUSTRATION.

Two hundred and eighty acres of land for farm purposes, with fields in alfalfa, grasses, grains, and forage crops, illustrating the best methods of field work.

A barn, fifty by seventy-five feet, arranged for experimental purposes, connected with a general-purpose barn, forty-eight by ninety-six feet. The barns are filled with improved machinery for shelling, grinding, thrashing, cleaning and grading grain, and for cutting for the silo. A model dairy barn for eighty cows, and cows to fill it.

During the winter of 1901-'02 we plan to fatten for the market a large number of hogs and steers, with the object of determining the best method of fattening with our drought-resisting crops. Students in the agricultural classes will be required to make a close study of the work throughout its progress.

Farm implements for all kinds of Kansas farm work.

Botany.

The instruction in the botanical department is along three lines:

First, as a Pure Science.—The department aims to give the student the training in observation and scientific reasoning, and also the information which he should have as a matter of general knowledge, regardless of his subsequent

vocation. Botany is the first natural science to which the student is introduced in his College course, and for this reason it is necessary that he receive in this department his elementary training in scientific methods.

Second, as a Science Underlying Agriculture.—It is well recognized that botany is one of the most important of the sciences upon which the practice of agriculture is based, for the reason that botany deals with plant life, and plant life is at the basis of agriculture. Whenever practicable, illustrations and examples in both the elementary and advanced work are chosen with particular reference to their bearing upon agriculture.

Third, Technical Botany, including such subjects as are of direct application in agriculture. The training in the special botanical studies of the agriculture course is chiefly of this nature, as will be seen by consulting the outline below.

Of the studies described below, Nos. 1 and 2 are required in the general science and domestic science courses; No. 1, 2 and 3 in the agriculture course, and No. 1 in the mechanical and electrical engineering courses.

1. **Botany I.** First year, fall term. This course covers the elements of morphology, physiology, and ecology. All of the great groups of plants are taken up and discussed in the order of their evolutionary development. Especial attention is given to the changes in structure which appear in response to changes in environment. Emphasis is laid upon the plasticity and adaptiveness of the plant organism. By grasping this fundamental conception at the outset, the facts of plant life, particularly studied in horticulture and agriculture, become more comprehensible and significant. The work of the classroom is supplemented by field trips under the immediate direction and supervision of the head of the department and the assistant. In this way a knowledge is gained of the relation of plants to each other and to their environment. A general study of the classification of the plant kingdom, sufficient to enable the student to understand the broad outlines, and the relationships of the great alliances, is secured in this course, and, by coming into close contact with plants as living organisms in their natural habitats, he becomes acquainted with the factors that regulate their life and activity. Coulter's Plant Studies is the text used.

2. **Botany II.** Physiological botany. Fourth year, winter term. During this term the forms and structural relations of representatives of all the great groups of plants are studied in detail in the laboratory. The object of the course is to give the student a comparative understanding of the morphological anatomy of the more important members of the plant kingdom. In this work, accuracy of observation is developed by exact studies, and drawings from the gross object with the unaided eye, and by means of the simple and the compound microscope. All necessary instruments and reagents are supplied by the laboratory. Drawing utensils are provided by the students, under the direction of the professor of botany. Laboratory outlines are furnished by the department.

3. **Botany III.** Plant diseases and plant breeding. Fourth year, spring term. Lectures and laboratory work. The first half of the term is devoted to the study of the commoner fungi which cause diseases in economic plants. The student is familiarized by the lectures with the great groups of the fungi and their chief subsidiary groups. The general morphology of these is discussed successively, and the morphology and physiology of the particular representative of each selected for laboratory study is given in detail, together with combative and preventive measures. In this way a foundation is laid for intelligent and systematic investigation of any of the economic fungi which the student may

wish to carry on in the future. A rich herbarium of types, and a constantly growing set of duplicates, furnishes abundant material for the work, and is supplemented by alcoholic specimens properly killed and fixed and by prepared slides. Ample literature on the subject of plant diseases is afforded by the library of the department and of the Experiment Station. The second half of the term is devoted to the study of plant breeding and plant evolution. The laws of heredity and variation are studied, and their application to the improvement of economic plants by selection and cross-breeding. The extended series of experiments now being conducted by the Experiment Station will be used for illustration. The work in plant breeding is conducted by means of lectures and conferences, supplemented by laboratory and field observation so far as possible. Bailey's *Plant Breeding*, and Darwin's *Origin of Species* are the basis of the required reading, and are to be procured by those taking the course. Prerequisites are botany I and II.

POSTGRADUATE COURSE.

4. **Botany IV.** General morphology of the algalophytes. Winter term, three afternoons a week. Lectures and laboratory work. This course involves a detailed study of the morphological characters of the algæ, fungi, and lichens.

5. **Botany V.** General morphology of the bryophytes and petridophytes. Spring term, three afternoons a week. Lectures and laboratory work. The work begun in botany III is here continued in the higher groups of liverworts, mosses, and ferns. Especial attention is given to evolutionary lines of development in these groups.

6. **Botany VI.** General morphology of the spermalophytes. Spring term, three afternoons a week. Lectures and laboratory work. The work of this course will be given in alternate years with botany IV, and covers the morphology of the gymnosperms, monocotyledons, and dicotyledons, representatives of each of the chief groups of these great alliances being studied in considerable detail.

7. **Botany VII.** Plant physiology. Fall term, two afternoons a week. In this course the chief functions operative in the life of the plant organism are studied in the laboratory. The phenomena of osmosis and imbibition, and the physiological functions of transpiration, respiration and photosynthesis are taken up in detail and demonstrated experimentally. Growth and imitation movements and the causes of disease and death to plants are studied. Emphasis is laid upon the chemical and physical basis of physiological phenomena. All necessary apparatus is provided in the laboratory, and the College greenhouses afford living material for research. No text is used, but the student is referred to the physiologies of Pfeffer, Vines, Sochs, Detmer and other standard authorities for special and detailed information. General instruction is by means of lectures. The laboratory work is conducted according to outlines prepared by the professor of botany.

8. **Botany VIII.** Ecology. Fall term, three days a week. This course involves the study of the reactions of plants to their environment in their associative relations as plant societies. Problems of ecological and geographical distribution will be considered, and as far as possible the work will be made individual, each student being directed into some special ecological question as early as possible. Lectures and conferences will furnish general guidance, and special reading will be assigned. The work proper will be strictly in the field.

9. **Botany IX.** Plant histology. Spring term, two afternoons a week. This is a course in laboratory methods, involving a study of processes of killing,

fixing and preserving plant tissues; dehydrating, embedding in paraffin and celluloid; microtome sectioning; mounting and staining of slides. A varied series of preparations will be worked upon, with a view to the acquisition of facility in technique and in the preparation of materials for research.

MEANS OF ILLUSTRATION.

A general herbarium, consisting of a large collection of plants of the United States and other countries; a Kansas herbarium, containing specimens illustrating the distribution and variation of plants throughout the state; a twig herbarium, illustrating woody plants in their winter condition; and a seed herbarium, containing a representative collection of seeds and fruits—all together, the herbarium contains about 70,000 specimens; also twenty-eight compound microscopes, seven dissecting microscopes, tools, reagents, etc. The department is provided with a zinc culture room, and the ordinary apparatus for bacteriological work; a dark room and apparatus for photography; microtomes and other apparatus for microtomic work; about 200 charts, illustrating all departments of botany; a botanical library of over 1200 bound volumes and numerous pamphlets.

Chemistry.

Modern industries are based on science, and one of the fundamental sciences is chemistry; this must, therefore, receive considerable attention in such an institution as this. The aim is to insist upon a mastery of the chief concepts of the pure science through the agency of text-book drill, accompanied by demonstrations in the lecture-room, and experimental observations by the student himself in the laboratory. As the course proceeds, illustrations of chemical principles are drawn from the industrial processes of the chemical, agricultural and domestic arts, thus impressing the practical nature of the study. The ultimate object of the instruction is to develop in the student the power to form independent judgments upon the manifold problems of daily life in which chemistry plays a part.

Of the studies described below, Nos. 1 to 8, inclusive, are required in the agriculture course; Nos. 1, 2, 3, 4, 5, 6, and 8, in the general science and domestic science courses; Nos. 1, 2, 3, 5, and 6, in the mechanical and electrical engineering courses.

1. **Chemistry.** Second year, fall term. A general introduction is given this term, consisting of about fifty lectures and experimental demonstrations, supplemented by both oral and written recitations. After a few weeks the periodic system of the elements is made the basis of chemical classification. Special attention is given to the non-metals and the general foundations of chemical science.

2. **Chemistry of the Metals.** Second year, winter term, twice a week. This course not only serves to elucidate chemical principles, but it is the basis of instruction in metallurgical processes and industrial applications of the metals.

3. **Elementary Laboratory Work.** Second year, fall and winter terms. A course of laboratory work one afternoon per week (two consecutive hours) is required of all students pursuing the study of elementary inorganic chemistry.

4. **Organic Chemistry.** Second year, winter term, three times a week. In this course special emphasis is given to the fatty compounds and the study of general reactions, as a separate elective course on aromatic compounds follows. Prerequisite: Course 1.

5. **Analytical Chemistry.** Second year, spring term. This course is designed not only to impart the principles and practices of qualitative chemical analysis, but to give opportunity for extending the student's knowledge of inorganic chemistry. Courses 1 and 2 must precede this.

6. **Laboratory Work in Analytical Chemistry.** This course must be taken with course 5, and occupies seven and one-half hours per week. The exercises are so arranged as to pass from the simple to the more difficult, and at the same time to facilitate comparative study of the various basic and acid radicals. Opportunity is afforded for advanced work to such students as desire it.

7. **Agricultural Chemistry and Soil Physics.** Third year, fall term. A series of lectures is given on the formation and characteristics of different types of soil; the soil requirements of a variety of crops; the modes of soil enrichment and amelioration, and the general relation of crops to earth, air, and water. Both chemical and physical relations are considered throughout this course, but especial attention is given to the study of soil moisture from the physical point of view. The lectures are illustrated by experiments. Courses 4 and 5 must precede this course.

8. **Chemistry of Foods.** Third year, winter term. This course is given by lectures during each half of the term, and embodies a presentation of the chemical composition of foods, the changes which they undergo in cooking and digestion, and their adaptation to the various needs of the animal body. Course 4 and physiology must be finished before undertaking this work.

9. **Advanced Chemistry of Foods.** This course may be taken by advanced or postgraduate students. It consists in study of the literature treating of food and nutrition from a chemical standpoint, and is accompanied by laboratory work. The latter feature may be enlarged to almost any extent that the student may desire. The higher lines of work in this course require some previous training in quantitative analysis.

10. **Quantitative Analysis.** May be taken up at any time after the completion of courses 5 and 6. After the necessary preliminary training, the student may give special attention to any line of quantitative analysis, such as that of foods and fodders, soils and fertilizers, ores, water, gases, etc. The investigation of special chemical questions is encouraged.

11. **Advanced Inorganic Chemistry.** In the spring term, lectures and laboratory work in this subject are offered as an elective to fourth-year students and postgraduates. The course will include assigned reading of a text-book in inorganic chemistry. Prerequisites: Courses 1, 2, and 3.

12. **Aromatic Compounds.** This course (offered in the fall term) is supplementary to course 4, and is an elective for fourth-years and postgraduates. Prerequisite: Course 4.

13. **Advanced Laboratory Work in Pure Chemistry.** Advanced laboratory courses, supplementary to the advanced classroom work, will be offered in any term to properly qualified students. Students undertaking this line of work must spend at least twenty or thirty hours of work under the direction of the professor in charge in order to receive credit.

14. **Historical and Theoretical Chemistry.** This course (offered in any term when three or more students apply for it) will be adapted to the convenience of instructor and students concerned. Prerequisites: Courses 10 and 12.

MEANS OF ILLUSTRATION.

The equipment of the chemical department was largely destroyed by fire May 31, 1900. This will be replaced and enlarged in many respects for the new building now under way. The temporary laboratory provides tables and equipment for eighty-eight students. The lecture-room is provided with the more necessary apparatus and illustrative material.

Domestic Science.

Of the studies described below, Nos. 1 and 2 are required of all young women, and Nos. 3 to 9, inclusive, are required in the domestic science course. Nos. 4, 5 and 6 are elective for young women in the general science course.

1. **Hygiene.** First year, fall term. A course of lectures in elementary hygiene for young women is given under the direction of the professor of domestic science. The general principles of wholesome living and care of the human body are the leading subjects taught. The student is required to keep a note-book of the work and submit it for weekly correction.

2. **Household Economics.** First year, winter term. Lectures, with weekly laboratory practice. The objective points, neatness, order, economy, and accuracy, will be observed. The subject of cookery, its origin, purpose, etc., table of measurements and weights, directions in measuring, definitions pertaining to manipulations, methods of cookery, etc., the general care of utensils, the kitchen and its adjoining apartments, the general sanitation of the home, general household management and home ethics constitute the leading subjects of practice and lecture work.

3. **Chemistry of Cookery.** Third year, fall term. Text-books, Mathieu Williams's *Chemistry of Cookery* and Ellen H. Richards's *Chemistry of Cooking and Cleaning*.

In the following subjects the student is required to keep a set of note-books, as follows: Permanent note-book for the lectures, recipe book for the practical work, and the daily class record of the individual and general work of each lesson given.

4. **Domestic Science I.** Third year, fall term. The following topics are considered: A course in fruit cookery, plain household cookery; lectures upon food principles, classifications, etc.; cooking temperatures, study of fuels, and fire building.

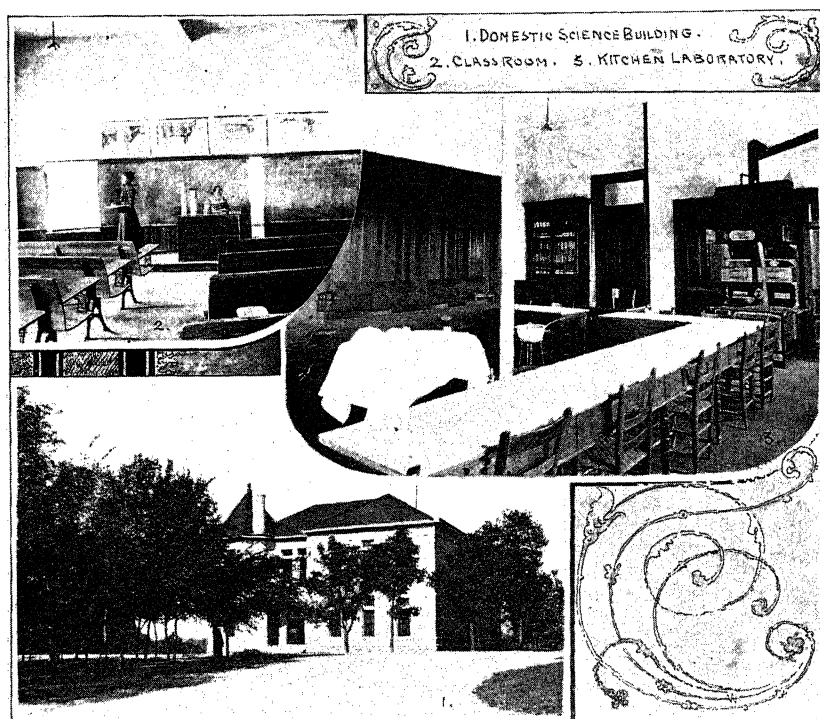
5. **Domestic Science II.** Third year, winter term. Plain household cookery, including the cooking of vegetables, cereals, fruits, meats, etc.; lectures on general serving and the science of nutrition.

6. **Domestic Science III.** Third year, spring term. Advanced cookery the first half-term, high-class cookery the second half-term; standard menus; lectures on the science of nutrition and the study of various food materials; instruction in general serving and entertaining is given; the study of kitchen, dining-room, etc.

7. **Therapeutic Cookery.** Fourth year, fall term. This work comprises special cookery for the sick, and mutual relations of foods and medicines; the chemistry of digestion and assimilation; the various ways of administering food to the sick and convalescent, and precautions in the general care of the sick.

8. **Emergency Lectures and Physiology.** Fourth year, winter term. This work consists of lectures on the following topics: First aids to the injured; general lectures on home nursing and home sanitation; contagious and infectious diseases; special and advanced physiology.

9. **Demonstrations.** Fourth year, spring term. Lecture work in scientific and practical cookery. Each student is required to give a demonstration lecture in cooking before the class, and give approved recipes, observing all the educational, scientific, technical and practical points involved in each method demonstrated. The student lecturer may select one assistant from the class, to assist in the general details of the work. In connection with this lecture work, each student is required to give a complete lesson outline and conduct one class in practical work according to the best approved methods in laboratory practice.



Domestic Art.

This department provides a systematic course in plain sewing and dressmaking.

The course of work in plain sewing is carefully graded, not only to insure a thorough knowledge of the subject, but to develop habits of order, accuracy and self-reliance. Each pupil is required to keep a note book in which she records a description of the work accomplished. A written examination is held at the end of each term.

Of the studies described below, all young women are required to take Nos. 1, 2, and 3, and those in the domestic science course must take No. 5.

Materials for No. 1 are furnished by the College, the pupil furnishing her own thread, needles, thimble, etc. In Nos. 2, 3, 4, and 5, the pupil furnishes her own materials and makes the garments for herself.

1. **Sewing I.** First year, fall term. The pupil makes a book of models, covering the full course in hand sewing, and consisting of basting, hemming, gathering, darning, patching, etc.

2. **Sewing II.** First year, winter term. Machine practice; drafting, cutting and making underskirt and drawers.

3. **Sewing III.** First year, spring term. Drafting, fitting and making dress without lining.

4. **Sewing IV.** Second year, fall term. Cutting and making corset cover and night-dress.

5. **Dressmaking.** Second year, winter term. Nos. 1, 2 and 3 are a prerequisite for this course. The use of a dress-cutting system is taught, and each pupil will be required to draft, cut and make a woolen dress for herself.

Ten hours per week are devoted to class work and about three hours' home work is required per week.

Drawing, Descriptive Geometry, and Architecture.

Drawing is the language of form and the key to every artistic and nearly every industrial pursuit. The educational and practical value of an extended and systematic course in its various branches can hardly be overestimated. The general aims of the several courses in industrial art are the same: (a) The cultivation of observation and analysis of form; (b) the development of correct taste; (c) the teaching of the different methods of graphic representation; (d) the acquirement of skill in handling drawing tools.

Of the studies described below, Nos. 1 to 8, inclusive, are required in the mechanical and electrical engineering courses; Nos. 1, 2, 3, 8, 9, and 10, in the general science course; Nos. 1, 2, 3, and 11, in the domestic science course; and Nos. 1, 2, and 3, in the agriculture course.

The College furnishes drawing-board, T square, triangles and water-colors for the graphic work done at the College; but all tools for home use, including drawing-board, T square, triangles, compasses, shading pen, and protractor, must be furnished by the student.

1. **Free-hand Drawing.** First year, fall term. Exercises with forms involving the right line and the arc, illustrating the effects of geometrical arrangement, repetition, alternation, symmetry, proportion, harmony, and contrast. After a few lessons in geometrical lines, the conventional surface ornament is taken up, and more subtle curvatures and complex forms are introduced. Text-book, Walters's Industrial Drawing, envelopes 2 and 7.

2. **Geometrical Drawing.** First year, winter term. Construction of perpendiculars, parallels, angles, polygons, tangents, etc. Construction of the ovoid, oval, ellipse, and spiral. Drawing, in India ink and water-colors, of various geometrical designs and architectural forms. Use of drawing-board and T square. Text-book, Walters's Industrial Drawing, envelopes 11 and 12.

3. **Primary Object Drawing.** First year, spring term. Discussion and drawing of geometrical models and simple objects. Exercises in shading from the object and from imagination.

4. **Orthographic Projection.** Second year, fall term. Principles of orthographic projection; the profile plane; the secant plane; rotation in space; change of ground line. Development of surfaces. Interpenetrations of the prism, pyramid, and polyhedron. Projection of the circle, cylinder, and cone. Exercises in pen and brush shading.

5. **Orthographic Projection.** Second year, winter term. Construction and projection of the conic-section lines. Construction of the cycloid, involute, spiral, cissoid, conchoid, curve of pursuit, helix, etc. Construction of screw forms. Interpenetrations of the cone, cylinder, and sphere. Shades and shadows of simple geometric forms. Exercises in pen and brush shading.

6. **Axonometry.** Second year, spring term. Problems in monodimetric and isometric projection. The approximate development of the sphere. Problems on the spheric triangle. Graphic investigations of the torus and its sections. Shades and shadows produced by local light. Exercises in pen and brush shading. Instruction and practice in the manipulations of the black- and blue-printing processes.

7. **Descriptive Geometry.** Third year, fall term. Discussion and solution of the usual problems relating to the point, right line, and plane. Generation and classification of lines and surfaces. Discussion and construction of tangents, normals, and asymptotes to lines. Study of osculation, rectification, and radius of curvature. Construction of tangent, normal and asymptotic planes and surfaces. Construction of tangents to curves of intersection. General characteristics of warped surfaces. Graphic analysis of the hyperbolic paraboloid, the conoid, the hyperboloid of revolution, the cylindroid, the helicoid, etc. Construction of tangent planes to warped surfaces. Construction of tangent hyperboloids.

8. **Perspective and Sketching.** Third year, spring term. Linear perspective is taught as central projection, and is intended to furnish the scientific answers to the questions which constantly confront the student of drawing from the object. It comprises the subjects of vanishing points, vanishing traces, measuring points, cylindric perspective and perspective corrections, shades and shadows in perspective, studio methods. The models used in the work in sketching are objects of utility and beauty, whose forms bear close relationship to geometrical types. The students are led to recognize the facts, relations and principles involved in the apparent form of the object, to note the distribution of light, shade, shadow and reflection on the same, and deduce the general principles which the observation and comparison of these appearances are found to establish. Each student is required to make eighteen original crayon sketches during the term.

9. **Projection Drawing.** Third year, fall term. The third-year work in projection drawing of the science course is similar in character and scope to the second-year work of the engineering course, as described in paragraphs 4 and 5.

10. **Advanced Object Drawing.** Fourth year, spring term. Exercises in pen drawing, crayon and brush shading, architectural and machine drawing, illustrating, thesis work, at the option of the student.

11. **Home Architecture.** Third year, winter term. This study is taught by lectures covering the following topics: Location of the home; landscape surroundings; roads, walks, fences, and outbuildings; the individuality of the home; building materials; the historic development of the dwelling-house; foundations and basement; the arrangement of the main-floor rooms; the roof and attic; heating and ventilation; water-supply; water-closets, cesspools, and other drainage problems; paint and varnish; interior decoration; the school-house. Each student is required to design a set of plans, elevations and details of a residence, with modern provisions for heating, ventilation, and drainage.

12. **Farm Architecture.** Second year of farmers' short course. Lectures are given on the following topics: Location of residence, barn, and outbuildings;

roads and walks; water-supply; drainage; building materials; individuality of the home; the general-purpose barn; the modern dairy barn. Half of the time is devoted to work in planning and drafting of farm buildings.

13. Architectural Course. The courses of study for all engineering branches must necessarily be the same with regard to work of a preparatory or general character, but differ with regard to the professional branches. Students who intend to take architecture in place of mechanical engineering may substitute architectural studies for the strictly professional work of the third and fourth years of that course. The department of industrial art is well equipped to teach the branches named. It owns a rapidly growing collection of illustrative building material, complete sets of drawings and blue-prints of most of the Kansas state buildings, a photographic camera, a dark room equipped with running water and ruby light, etc. The substantial buildings of the institution and its complete system of heating and lighting furnish additional illustrative material.

English Language and Literature.

DEPARTMENT AIMS.

1. To create and increase a taste for reading.
2. To develop a careful and discriminating judgment regarding literature and printed matter.
3. To teach by examples the meaning and uses of the various forms of literature.
4. To increase the student's stock of words by an extended experience in word analysis, dictionary use, and language of history.
5. To give him actual practice in the exercise of many forms of composition, and thereby to develop facility in expressing himself.
6. To beget the historic sense while tracing the literature of the Anglo-Saxon race in its cause-and-effect relations to the great events and movements of history.
7. To lead the student to a plane in which he may see language and literature as the most complete and most permanent index to the civilization of any people in any age.
8. To point out the vital connection between literature and life, and to inspire in the student such an appreciation of esthetic values as shall enrich and ennoble his life, be his vocation what it may.

Of the studies described below, Nos. 1, 2, 3 and 5 are required in all courses; No. 6 is required in the agriculture and mechanical and electrical engineering courses; No. 7 is required in the domestic science and general science courses. No. 4 is an elective in the domestic science course.

1. English Readings I. First year, fall term. The careful study of a number of standard authors, of first-class interest and easy style. As far as possible, the selections are read and discussed in class. Character sketches, paraphrases, abstracts and analyses are frequently required, so that the students are not only given continual opportunity of rendering and hearing the best thought in the best forms, but are, at the same time, encouraged to develop their own thought and skill in abridged reproductions. With these objective readings, the student learns to distinguish various forms and styles of literature, and to note the qualities of thought and expression. In conjunction with this course, Swinton's Word Analysis is used twice a week as a guide to the study of etymology.

FALL-TERM CLASS READINGS.

Benjamin Franklin's Autobiography; Irving's Sketch Book; Shakspeare's Julius Cæsar; Goldsmith's Deserted Village; De Quincey's Flight of a Tartar Tribe; Byron's Prisoner of Chillon.

2. **English Readings II.** First year, winter term. This is a continuation, with new authors, of the work begun in the fall term.

WINTER TERM CLASS READINGS.

Longfellow's *Evangeline*; Hawthorne's *House of the Seven Gables*; Coleridge's *Ancient Mariner*; Tennyson's *Princess*; Emerson's *American Scholar*, *Self-reliance*, *Compensation*; Shakspeare's *Merchant of Venice*.

3. **English Themes.** First year, spring term. The work of this term is an extension and application of that begun in composition. With Herrick and Damon's *Composition and Rhetoric* as a guide, the student is given further experience in outlining and developing themes. As far as possible the natural method is pursued. The student is encouraged to write freely upon subjects that appeal to him and that spring spontaneously from the activities and interests of his daily life, without severe restraint at first, or strict regard to the formal rules of rhetoric. When once the fear and dread of writing have been somewhat overcome, and he has learned that, after all, writing is not very different from talking, and that it may become real fun if he choose to make it such, the instructor begins to practice the pruning process more and more strictly. It is believed that successful instruction in this subject depends not so much upon precept as upon example and practice. The chief aim is to keep the student interested and to keep him writing in accordance with the best models of English style. To this end the instruction is made extremely flexible, and freshness and variety of method are constantly sought.

4. **American Literature.** Second year, winter term. The work of this term will consist of a rapid survey of the rise and development of American authorship from colonial times to the present. Due attention will be given to the lives of the representative men of letters, for it is believed that the works of our great writers will not be fully appreciated until the authors themselves have been made to live in the thought and affection of the reader. Many of the shorter poems and sketches of our chief poets, essayists and story writers will be read and discussed in class, while a number of the longer classics will be assigned for outside reading and analysis. The method of instruction will include both text-book and lectures.

5. **Rhetoric.** Third year, fall term. This includes the philosophy and analysis of the principles involved in the various kinds of literary art. It covers a comparison of the ancient and modern ideas of the subject; the meaning of rhetoric as a science and as an art; the nature and differences between the many kinds of style; the elements which go to make up these; the characteristics and uses of the great divisions—prose and poetry; the grand problem of the material and thought, or of the content of discourse of whatever sort, how to get it, how to handle it; how to limit a subject, how to expand a theme, and how to stop. The work will be partly by lectures, partly by text-book study, partly by examining examples in the standard authors, and partly by written work from the students.

6. **English Literature.** Fourth year, spring term. A brief survey of the principal facts in connection with the rise and development of English literature, together with lectures upon the chief English writers, and a careful study of the thought and literary form of some of the great masterpieces from Shakspeare's time to the present.

7. **English Literature.** Fourth year, winter and spring terms. The purpose of this course is threefold: To trace the rise and growth of English literature from its beginning until the present time; to introduce the student in a

modest and elementary way, to the various aspects and species of literature and to the artistic problems involved in an appreciative study of the great classics of the language; and, lastly, to study and analyze in chronological order a number of the famous masterpieces of English literature in accordance with sound principles of taste and interpretation. Pancoast's Introduction to English Literature will be taken as a guide, but there will be no slavish adherence to the text. The instruction will be varied by occasional lectures from the professor in charge, and the presentation, from time to time, of thoroughly prepared papers by members of the class. At all times the utmost freedom of discussion will be invited. A few of the great classics will be read, analyzed, and interpreted in class, while others will be assigned for private reading.

Especial stress is all the way laid on finding the elements of beauty and moral power in every production read. All together, it is hoped that this extended excursion along the most considerable stream of the world's literature may prove an inspiration toward noble and earnest life; may show the power of language and the imperishable character of its more beautiful forms; may reveal something of the mode and meaning of social advance and civilization, and be to the student in after-life a well-spring of pleasure and profit.

Geology.

The object of this work is to give an application of chemistry and physics to the subject of the earth. Until a separate professorship of geology is established in this institution, the part of geology described here naturally falls to the instructors in the department of chemistry, while any consideration of the history of rock formation and the study of fossils would as naturally be taken up in the departments of botany and zoology.

Of the studies described below, No. 1 is required in the general science, domestic science and agriculture courses.

1. **Inorganic Geology.** Third year, spring term. As already stated, more attention is given to the physical and chemical aspects of geological study than to the biological and historical sides of the subject. The aim is to teach the students something of the relations of geology to other sciences and of its importance and scope, rather than to enter into its details and technicalities. Especial emphasis is given to the relation between this science and physical geography. The students are required to become familiar with some of the typical minerals and rocks, and to distinguish sharply between these classes. Special specimens are available for actual hand study, as well as museum specimens for comparison and reference.

2 and 3. Elective courses are offered whenever a sufficient number of Senior students desire instruction in this department. The subject taken up may be crystallography or blowpipe analysis (determinative mineralogy), or both of these subjects in succession.

History and Economics.

Whatever occupation in life men may adopt—whether they become farmers, lawyers, teachers, or merchants—they are first of all citizens. For this reason the College offers to its students instruction in those subjects which fit them in a special manner to discharge the duties which they owe to their state and to the nation and to form an intelligent judgment concerning the public questions which, as voters or perhaps as officers, they will be called upon to meet. The work of this department is arranged with this end in view.

Of the studies described below, all, except No. 6, are required in all courses.

1. **General History.** Third year, fall term. An outline of the chief epochs in the history of the most important countries of the world is given as an introduction to the more detailed study of certain selected epochs. Text, Adams's European History.

2. **Nineteenth Century History.** Third year, winter term. Beginning with the outbreak of the French revolution, the chief movements in the history of Europe are studied, with a view to explaining the existing condition of European politics. Particular attention is devoted to the progress of democracy in England and on the continent, especially in so far as it is reflected in the form of government. There is also considerable discussion of foreign topics. Text, Judson.

3. **Civics.** Third year, winter term. This course is given by lectures and text-books, and involves a study of the formation of the constitution, the organization and methods of the federal, state and local governments, the most important sections of the state and federal institutions, and a discussion of current topics in politics and legislation. Text-book, Bryce, The American Commonwealth, abridged edition.

4. **Principles of Economics.** Third year, spring term. This course is an introduction to the general subject, with elaboration of certain aspects. Care is taken to compare conflicting views and to point out sources of information on all sides of vexed questions. Sound thinking rather than the dogmatic teaching of certain views is the object sought. Text-book, Walker, Political Economy, briefer course.

5. **History of Industries.** Fourth year, fall term. The development of science and industry is traced in a course of lectures. Text-book, Wright's Industrial Evolution of the United States.

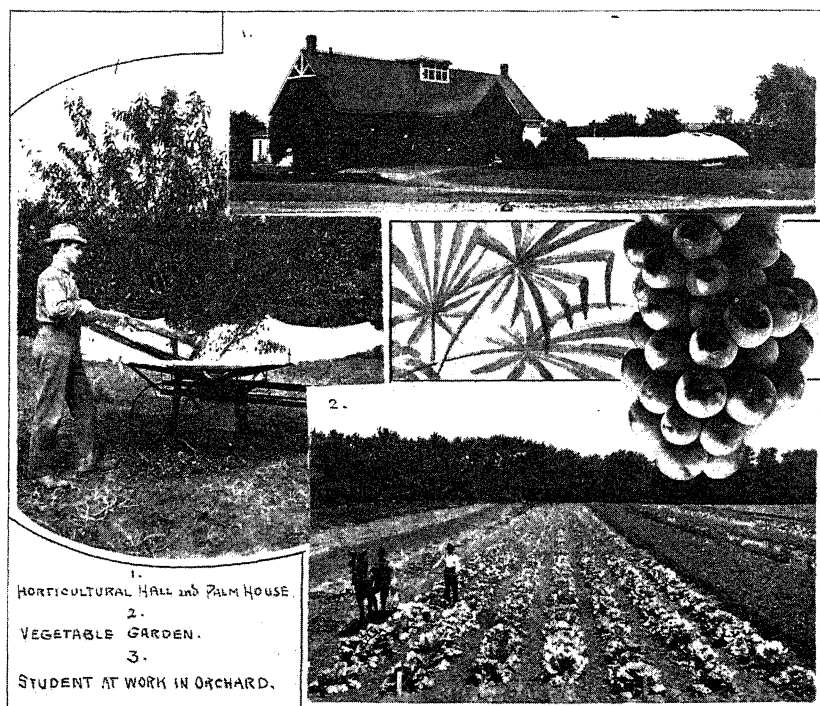
6. **Constitutional Law.** Third or fourth year, spring term. This course is an elective for those students of the third and fourth years who have had the course in civics. In it, during the first half-term, some of the leading decisions of the supreme court interpreting the constitution are studied. In the second half-term lectures are given on the principles of international law. Text-book, Boyd, Cases on Constitutional Law.

Horticulture and Entomology.

Of the courses enumerated below, Nos. 1 and 5 are required in the general science course; Nos. 1, 4, and 5, in the domestic science course; and Nos. 1, 2, 3, 5, 7, and 8, in the agriculture course.

1. **Principles of Horticulture.** Second year, fall term. The lectures of this term present the principles of the art, introducing the facts underlying methods of propagation, nursery, orchard and garden treatment; the handling, storing and preservation of fruits, with a brief discussion of the origin and characteristics of garden varieties.

2. **Vegetable-gardening.** Third year, spring term. The work of this term is devoted to an examination of the operations of vegetable-gardening, with special attention to seasonable practice, including the application of fungicides and insecticides, and a more detailed study of varieties with reference to local conditions.



3. Advanced Horticulture. Fourth year, winter term. The principles of construction and management of various glass horticultural structures, specific methods of propagation, the forcing of flowering and vegetable plants, and other work of the season, are among the topics of the lectures of this term.

Electives are offered in the fourth year to classes in ornamental gardening, pomology, or the principles of forestry.

4. Floriculture. Third year, winter term. This subject, open to young women in the domestic science course, includes general greenhouse management, window gardening, the growing of flowering plants in the open air, the destruction of plant pests, etc., practice alternating with lectures on these topics.

5. Entomology. Second year, spring term. In the work of this term, the intention is to give the student a basis for the intelligent appreciation of the important relations of the science to agriculture and horticulture. A brief view of structural types precedes an outline of insect classification, and a special study of the economic bearings of the subject completes the work. Illustrative material is furnished from the individual collections of the students and from the College museum. Charts, dissections and drawings from nature are used to illustrative points of value in classification. The pocket lens used in botany is required in this study. Text-book, Comstock's Manual for the Study of Insects, abridged.

6. Advanced Entomology. Fourth year, elective. Review of the general subject, with the text-book, Comstock's Manual, extended. Entomological methods, including field-work in observation and collection, laboratory work in

preparation, dissection, and preservation, and in the study of life-histories by the aid of the vivarium. The independent and critical study of systematic entomology, the work in which may be restricted, when desired, to groups of special agricultural importance. Economic entomology, so far as relates to the insects of field and garden, with a special study of methods of repression.

7. Industrial Horticulture. Second year, fall term. The practical work of the term is largely devoted to the seasonable operations of gathering and storing seeds, fruits, and vegetables, with the addition of practice in the modes of winter protection of garden plants, and in the selection and preparation of material for the winter's work in their propagation.

8. Industrial Horticulture. Third year, winter term. The practical work of this term is devoted to the indoor methods of propagation of fruit- and ornamental-trees and shrubs, supplemented by work with vegetables in the forcing-house.

For those electing horticultural practice as industrial in other classes than those of the above outline, there will be provided work appropriate to the season, and suited to the advancement of the student.

Mathematics.

It is the aim of the department of mathematics to give a thorough training in a small number of subjects, and to develop in the student the ability to attack new problems, rather than to burden his mind with a large number of facts or special methods. It is also characteristic of the methods of the department that an attempt is made to give to the mathematical subjects a touch of human interest by directing the attention of the student to the historical development of these subjects. For example, the course in plane geometry is opened by a lecture on the history of geometry. The following statement contains a brief description of the courses to be given next year:

Of the courses described below, all except No. 6 are required in the mechanical and electrical engineering courses; Nos. 1 to 7, inclusive, are required in the general science course; Nos. 1 to 4, inclusive, in the domestic science course; and No. 1 to 5, inclusive, in the agriculture course.

1. Algebra II. First year, fall term. Simple equations with more than one unknown quantity, involution, evolution, fractional and negative exponents, radicals, and quadratic equations with one unknown quantity.

2. Algebra III. First year, winter term. Quadratic equations completed, ratio, and proportion. Arithmetical and geometrical progression. Review of work covered so far.

3. Geometry I. First year, spring term. (Text-book, Phillips and Fisher's Elements of Geometry, abridged edition.) First, second and third books, with numerical exercises and theorems for original demonstration.

4. Geometry II. Second year, fall term. Continuation of course 3. Review of previous work; fourth, fifth, sixth and seventh books, treated as before, with original exercises. A short time is devoted to books 8 and 9, only a few important propositions being demonstrated.

5. Trigonometry. Second year, winter term. Solution of plane triangles; essentials of goniometry; applications to surveying and navigation.

6. Surveying. Second year, spring term. Field work, two hours per week. Use and adjustment of instruments. Chaining, leveling, and land surveying. The data for a definite series of problems laid out during course in trigonometry of the winter term are obtained in the field; results platted and computed.

7. **Higher Algebra.** Second year, spring term. Factoring, theory of quadratics, ratio and proportion, variation, series, undetermined coefficients, indeterminate equations, logarithms, elementary theory of coördinates.

8. **Analytic Geometry.** Third year, fall term. Rectangular and polar coördinates, the straight line and circle, other conic sections, the general equation of the second degree.

Calculus. Osborne's Calculus, with lectures.

9. Third year, winter term. Differentiation, with the usual applications to maxima and minima, mechanics, series, etc.

10. Third year, spring term. Integration, with applications.

In addition to these, courses in theory of equation, differential equations, elliptic functions or other branches of the higher mathematics may be given to postgraduate students, or to undergraduates who are able to carry extra work.

Mechanical.

In the mechanical engineering course, all studies below are required but No. 8.

In the agriculture course, studies 1, 2, 3 and 8 are required.

In general science course, 1, 2 and 3 are required, and additional shop work is optional.

In the electrical engineering course, all studies are required except 8, 17, 21, and 27.

1. **Woodwork.** A graded set of problems in joining, a working to dimensions, together with proper use and care of bench tools. Advanced practice in general woodwork, carpentry, cabinet-making, turning, and pattern-making; special attention being given to the making of patterns for machinery and apparatus to be constructed in the shops.

2. **Blacksmithing.** A graded series of problems of forgings, welding and forming under the hammer, designed to teach the management of material and blacksmith tools. Advanced work is given in tool making, tempering, hardening, and general blacksmithing work.

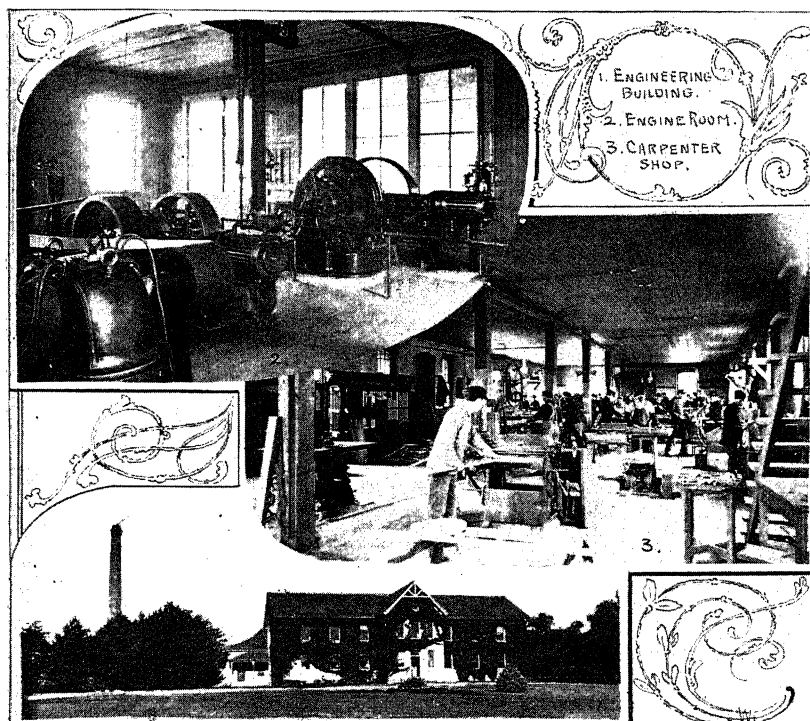
3. **Foundry.** Foundry practice is given in both floor and bench molding, including the making of cores, brass and iron castings, and the mixing of special alloys. Cupola practice and the making of machine castings for shop use are included.

4. **Machine-shop.** Instruction is given in bench and machine work, filing and fitting, laying out work from drawings, and planing. Lectures are given on machine-shop tools, their use, care, and construction; also on shop standards and methods.

5. **Elementary Analytical Mechanics.** A course in elementary mechanics, including the laws of motion, force, work, and energy, together with the composition and resolution of forces and moments.

6. **Hydraulics.** Lectures on hydromechanics will be given, including problems in flotation, flow from orifices and pipes, together with the measurement of water by weirs and jets.

7. **Shop Practice.** Machine-shop work on plans, lathes, shapers, milling-machine and grinder, giving general shop practice in the construction of machinery.



8. **Agricultural Mechanics.** Advanced instruction in machine-shop is given to agricultural students. This instruction includes bolt making, grinding, sharpening, screw setting, and repairing of agricultural machinery. It is supplemented by lectures and practical instruction in the operation of traction-engines.

9. **Shop Practice and Lectures.** Shop practice will comprise advanced machine work and the building of fine tools and special apparatus and machinery. Lectures will be given on machine-shop methods of production, cost of work, and arrangement of factories and machinery.

10. **Mechanical Drawing.** The drawing of this term will begin with exercises in lettering and the making of simple working drawings, followed by construction drawings to scale and the preparation of plates of standard details.

11. **Graphic Statics.** The graphical determination of stresses in trusses, frame structures, and machines, together with the design of roof trusses and cranes.

12. **Shop Practice.** Machine-shop practice, together with instruction and practice in the boiler-house and engine-room, the management of pumps, engines, and electrical apparatus.

13. **Principles of Mechanism.** A study of the fundamental principles of machinery, with special work in gears, linkages, belting, and devices for transmission of power.

14. **Machine Design.** Designing follows in the work in drawing, and is based on Low and Bevis's text. Complete designs of simple machines and tools are made, with tracings and blue-prints.

15. **Shop Practice.** In this term advanced machine-shop work is supplemented by practice in steam- and pipe-fitting as relates to power-house work and steam-heating systems.

16. **Mechanics of Materials.** This course is based on Merriman's text on Engineering Materials, with special attention to the mechanics of beams, columns, shafts, and practical problems on the use of construction materials.

17. **Engineering Laboratory.** Engineering laboratory practice will include tests of power by both absorption and transmission dynamometers, engine and boiler tests, calibration of electric machinery, strength of materials, etc.

18. **Engineering Design.** Practical problems will be given in roof design and power-house arrangement and construction.

19. **Shop Practice.** Shop practice of this term will include the building of special machinery, such as engines, lathes, and laboratory apparatus.

20. **Applied Mechanics.** A text on applied mechanics, consisting largely of practical problems, will be used to instil the principles of theoretical mechanics.

21. **Engineering of Power Plants.** Hutton's text on Mechanical Engineering of Power Plants will be used as a basis for study of the design of engines, boilers, and the details of modern power plants.

22. **Engineering Laboratory.** Advanced work in the engineering laboratory will be given, covering tests of structural materials, the determination of power, hydraulic experiments, calibration of instruments, and tests of electric machinery.

23. **Machine Design.** Beginning with machine parts, the work will include the complete design of machines and the making of working patterns, pattern drawings, and blue-prints.

24. **Shop Practice.** Machine-shop practice in the building of machine tools and testing apparatus for laboratory.

25. **Applied Mechanics.** A continuation of previous term's work, embracing instruction in the application of dynamics to practical problems in machinery and structures, the stresses in machines, elastic properties of materials, hydraulics, power transmission, mechanisms, etc.

26. **Thermodynamics.** Special attention is paid to the theory and underlying principles of the steam-engine, steam-turbine, explosion engines, compressed-air apparatus, and refrigerating machinery.

27. **Machine Design.** Advanced work in the designing of machinery, engines, and tools, attention being given to the development of complete machines for special work.

28. **Thesis.** Engineering students are expected to present, for graduation, a suitable thesis on some subject relating to their work. Practice in the machine-shop is omitted in this term, and it is considered that the thesis work should occupy at least ten hours per week.

EQUIPMENT.

The shops of the Kansas State Agricultural College are furnished with the best modern machinery and tools for working both wood and iron, and are in operation six days per week throughout the year.

WOOD SHOP.—The wood-working room is 40x103 feet, contains 220 separate kits of tools, and benches for fifty students in each class; lathes, planer, circular saw, friezer, mortising machine, grinders, and tool room containing all kinds of

wood-working tools for general use, together with complete outfit of wheelwright's tools.

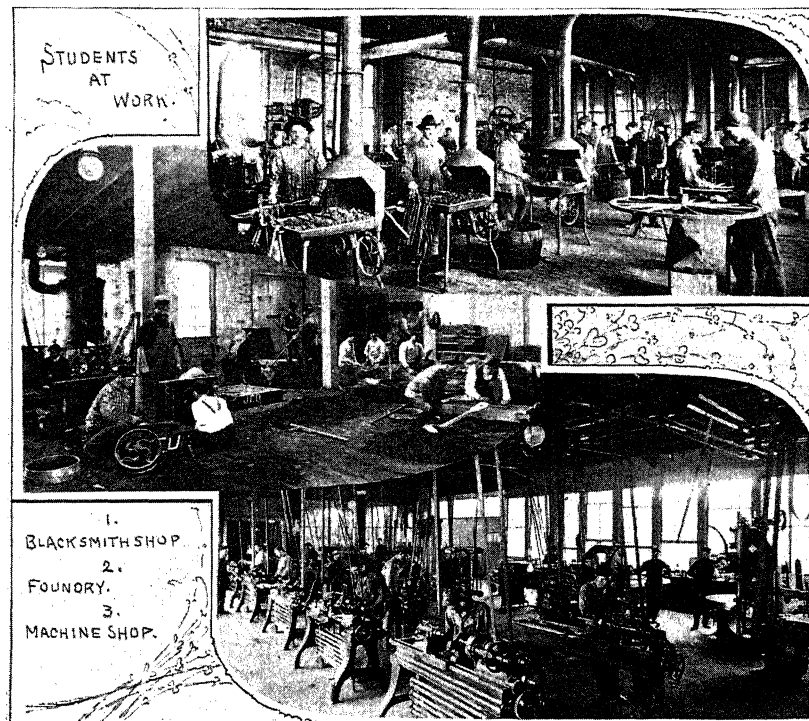
MACHINE-SHOP.—This room is 40 x 80 feet, contains twelve fourteen-inch engine-lathes, one sixteen-inch combination engine and turret lathe, speed lathe, Gray planer, Hendy-Norton shaper, Brown & Sharpe No. 2 universal milling-machine, Walker universal grinder, special drill grinder, key seater, bolt-cutter, pipe machine, vertical drills, fifty-one inch vertical turning and boring mill, benches and tools for fifty students, and a complete stocked tool room, equipped with the finest modern tools.

BLACKSMITH SHOP.—This room is 40 x 50 feet, equipped with twenty-four forges fitted with power exhaust. Each forge has anvil and complete set of smithing tools. In addition to the general tools for a fully equipped blacksmith shop, there are also installed here power punch and shears, cold saws, and a number of pieces of special apparatus built by the department.

IRON FOUNDRY.—This room is 40 x 50 feet, equipped with two-ton cupola, core oven, an exceptionally large number of flasks, ladles, traveling hoists, etc. The foundry makes all castings for machine building, together with boiler fronts, grate-bars, and special repair work.

BRASS FOUNDRY.—This room is 16 x 30 feet, with crucible furnace flasks, and complete equipment for bench and floor molding. The product consists of bearings, friction metal, valves, fittings, etc.

PIPE-FITTING ROOM.—This room is 18 x 50 feet, contains a motor-driven Jarecki pipe machine, and is completely equipped with tools used by steam-fitters. Practice in pipe-fitting and steam-fitting is given.



ENGINEERING LABORATORY.—This room is 35x40 feet, and contains a great variety of apparatus, among which may be specified a 100,000-pound testing machine, both automatic and autographic; Flather transmission dynamometer, for determining the power required by various machines; complete cement-testing outfit; absorption brakes; steam indicators; gauge-testing apparatus, and a variety of special machines for the testing of material; also, thermometers, calorimeters, speed indicators, etc. The very complete boiler- and engine-room adjoining the laboratory, together with a ten-ton refrigerating plant, afford special opportunities for the work relating to steam engineering and refrigeration.

POWER PLANT.—The boiler-room contains five 60-horse-power horizontal-return-flue boilers, one 100-horse-power boiler, pumps, steam-traps, etc. These boilers are used for the generation of steam, both for power and heating purposes, and are independently connected, that they may be tested individually or in groups. The engine-room is equipped with one 100-horse-power, medium-speed engine, directly connected to a 60 K. W. multipolar generator, with marble switchboard and complete apparatus; one 50-horse-power Ball & Wood engine, belted to bipolar generator, with switchboard; one 10-horse-power Atlas engine; one 5-horse-power generator, built in the shops, for testing purposes; one Shipman coal-oil engine, and several small dynamos for testing purposes. In connection with the power plant is a very complete rope-driven installation, especially designed for the department.

CLASSROOMS.—On the second floor of the wood-working department are found the classrooms, drawing-rooms, photographic rooms, paint room, varnish room, and pattern-storage room.

Military Training.

Drill Regulations. During the winter term of the first year the cadets have one lesson per week in the "Drill Regulations of the United States Army." This includes a study of the soldier, the squad, and the company, and their organization and movements.

Military Science. Three hours per week are devoted to the study of the elements of military science during the winter term. The recitations and lectures embrace the elementary principles that govern the art of war, the disciplining of troops, military law, the use of small arms, and, in fact, give a practical knowledge of applied military science, such as an officer of volunteers should be conversant with when called into the field.

Infantry. Special attention is given to setting-up exercises, school of the soldier, company, and battalion, and such ceremonies as parades, reviews, inspections, and guard mounts.

Artillery. Manual of the piece, mechanical maneuvers, and practice firing with blank cartridges.

Target Practice. A good range gives excellent opportunity for rifle practice, which receives considerable attention.

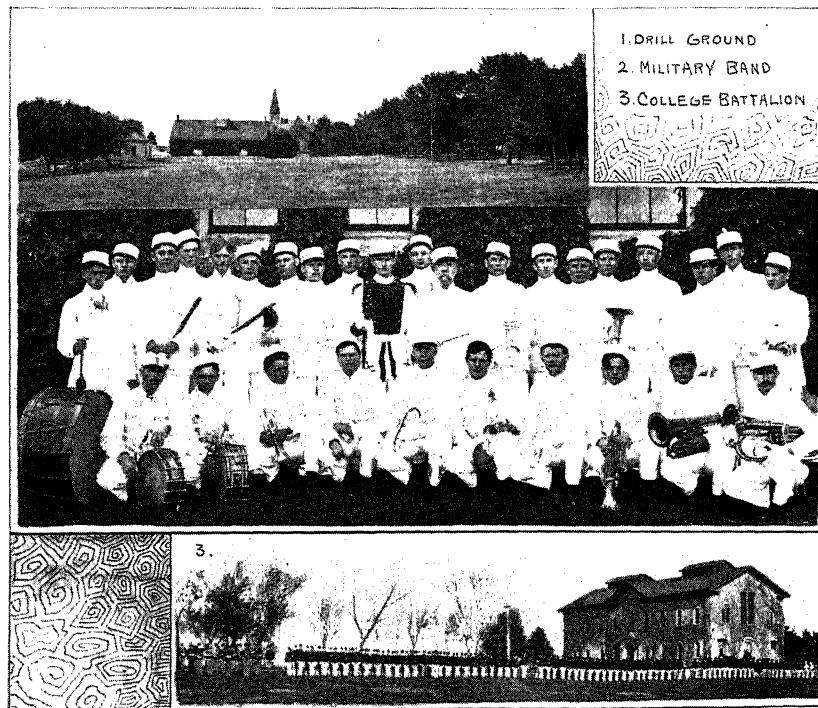
Signaling. A class is instructed each year in the sending and receiving of messages by the flag system in use in the regular army.

The national government has supplied the College with 245 cadet rifles and an equal number of sets of infantry accouterments; also, two three-inch field-guns and carriages. Swords, target supplies and annual issues of ball and blank cartridges are also received from the general government. The College furnishes uniforms to all students who do not wish to purchase their own, to be worn only during the drill hour. Each student may buy his own suit, to be worn whenever he pleases. The following is a description of the suit: "This suit to consist of

regulation blue cap with college emblem, blue blouse cut and trimmed in officers' style, gray trousers trimmed with black mohair braid."

War Department Record. At the close of the year the names of the three cadets most distinguished in military science and tactics are reported to the war department for insertion in the United States army register, and also to the adjutant general of the state.

Organization. The cadets are organized into a battalion of four companies and a band. The commissioned officers are chosen from the Senior and Junior classes, and the non-commissioned from the Sophomores.



Music.

Recognizing music as a factor in education which is practical and elevating, and believing that the germ of artistic faculty exists in every normal person, the following unique and generous provisions have been made for its introduction into the several courses.

Students may take music for a single term or more. A full course, extending over four years, includes theory, notation, voice culture, singing, harmony, composition, and technical drill on one or more instruments. The College pianos and organs are used for daily practice; the other instruments must be provided by the pupils using them.

Instruction in music is furnished free, under the direction of the professor in charge, to all students in the College, as follows:

1. **Notation and Theory.** Class B meets on Tuesday, at 1:30 P. M.; class A, on Wednesday, at 12:20 P. M.

2. **Harmony and Composition.** Classes in harmony and composition will be formed when the demand justifies their organization.

3. **Vocal Music.** B classes meet on Tuesday at the first and third hours, and on Wednesday at the second hour. A classes meet on Thursday at the first and third hours, and on Friday at the second hour. A general class meets on Friday, at 12:20 P. M.

4. **Instrumental Music.** Instruction upon the piano, organ, violin, mandolin, guitar, flute, clarinet, cornet and the more important orchestral and band instruments is given free to students in the regular courses, under the following conditions:

a. **Elective.** Music may be taken as an elective for the year in place of oratory by the members of the domestic science course. Students taking it as an elective will be required to furnish their own instruments, if they wish to practice more than one period.

b. **Industrials.** It may be taken as an industrial by ladies only, in connection with their notation and vocal music, after the required industrials of the first year, and after passing an examination equivalent to two terms in vocal music, in which case one period's daily practice at the College or at home is required.

c. **Extras.** It may be assigned as an extra to students, ladies or gentlemen, who do well in their general course of study, on the same conditions as above, excepting as to practice, when students may furnish their own instruments.

d. **Optional.** All music is optional—is taken at the choice of the student—but after assignment regular attendance is required as at other classes. Class organization shall be wholly under the control of the professor of music.

e. **Musical Organizations.** Each instrument has a distinct function in the science of tonal expression, and only in their combination are the finest effects in the coloring of the melody, harmony and rhythm procured. This combination is made possible in the musical department by the number of pupils and the variety of instruments studied. All students who are sufficiently advanced to join the College glee club, College orchestra, or the mandolin, guitar and banjo club, or the elementary band, or the College band, may become members by assignment.

f. **Public Exercises.** Music for commencement week and other public College exercises is furnished by the musical department, under the direction of the professor in charge, and all students in the department shall be subject to his call to assist in furnishing the same.

Oratory.

The aim of this department is to so develop the powers of the students' minds that they may be able to think more clearly for themselves, and to express their thoughts effectively in oral form. Practical work is done, according to natural and scientific methods, and every effort is made to adapt the work to the needs of the particular class of students to whom it is presented. In all the courses personal criticisms and suggestions are made. The work is scientifically classified and arranged according to pedagogical principles. Occasional lectures will be given.

Of the studies described below, Nos. 1, 2 and 3 are given during two terms in the agriculture and mechanical and electrical engineering courses, and during four terms each in the domestic science and general science courses. For the amount of time required in each course, see "Schedule of Courses of Study,"

on another page of this catalogue. No. 4 is required in the third and fourth year in all courses. No. 5 is given during one term in the domestic science and general science courses, and No. 6 during two terms in the same courses.

1. **Physical Culture.** This is a course in psycho-physical culture, and consists entirely of movements, without apparatus, designed to develop health, strength, freedom and grace in the body, in order that it may act quickly and truly in obedience to the highest thoughts, feelings and purposes of the soul. During the entire course, daily drill on the exercises will be given in the classroom. The work is thoroughly practical, and will be of benefit to persons in any walk of life.

2. **Voice Culture.** The voice drill is designed to fit the voice to fulfil its highest function, namely, to be a willing servant of the soul, and to assist the body in revealing the mental states. It consists of daily practice on exercises for freedom, flexibility, volume, harmony, and expressiveness of voice.

3. **Rendering.** The work in rendering is based upon the natural order of unfoldment in the activities of the human mind, and is in accord with the latest approved pedagogical principles, the aim being to cultivate *original thought* and to produce that condition of mind and heart which shall result in *personal power* and *character*. This is done by bringing the pupil into vital relationship with the masterpieces of the greatest minds, and causing the pupils, through sympathetic experience, to reproduce in others the same mental states in which those great minds were when they wrote or spoke. The method is free from mechanical dictation, working always from within outward. The results are obtained entirely by means of arousing the activities of the pupil's mind through concentration upon proper objects of thought. Individual drill in reciting from memory, on the platform, selections from standard authors, together with criticism and suggestions for practice, will be given throughout the course. The theory and philosophy of different phases of the work will be set forth as far as may be practicable in the time.

4. **Public Speaking.** Each third-year student appears in chapel, before the whole College, twice during the year, with declamations. Each fourth-year student appears in the chapel once during the year, in an original part. The original parts are upon subjects chosen by the students and written under the direction of the professor of oratory. For the chapel work, the students are prepared by rehearsals with the professor in charge of the department. This work is required of *all* third-year and all fourth-year students before graduating, regardless of which course they are taking.

5. **Extemporaneous Speaking.** Each fourth-year student in the domestic science and general science courses is required to present in class one extemporaneous discourse of five minutes' length, and also one of ten minutes' length. These are not written and committed to memory, but are prepared and given extemporaneously and without notes, and furnish excellent practice in original thought. Criticisms and suggestions are given by the professor in charge.

6. **Responsive Exercises** in expressive physical culture and voice. This work forms an advanced course in the domestic science and general science courses, in the third and fourth terms.

Physical Training.

The attainment of robust physical health is one of the important aims of the college graduate. With this object in view, a well-regulated system of physical training has been devised and is successfully operated. The work is required of all first- and second-year young women, except such as are found to be physically unable to engage in it.

Before entering upon the work a physical examination is made by the director of the gymnasium. The examination includes measurements of physical proportions, and takes note of the condition of the heart and lungs. At the same time the family and personal history is inquired into, so as accurately to estimate the condition of the student. From this examination an anthropometric chart is plotted, showing size, strength, and development, and defects in comparison with the normal standard.

It is the object of the director to give such exercises as will give increased health, strength and symmetry of body.

Daily classes are held in light gymnastics—movements that can be practiced in any position with or without apparatus—marching, free work, bells, wands, etc.; heavy gymnastics, including chest weights, flying rings, horse, bars, etc.; gymnastic games.

During the fall and spring terms, when the weather permits, exercises are taken in open air.

Physics and Electrical Engineering.

In the following courses instruction is given by text-books, lectures, and experiments. Attention will be called to the practical applications of the principles learned. In all courses special lines of reading will be encouraged, and investigation and experimentation, so far as the equipment of the department will permit.

Of the studies described, Nos. 1, 5 and 6 are required in the agriculture, domestic science and general science courses; Nos. 1, 2, 3, and 4, in the mechanical engineering course; and all except Nos. 5 and 6, in the electrical engineering course.

Text-books: No. 1, Carhart and Chute's Elements of Physics; Nos. 2, 3, and 4, Carhart's University Physics; Nos. 5 and 6, Barker's Advanced Physics.

1. **Elementary Physics.** First year, spring term. This term's work is intended to give the student a general view of the subject, with such laws and principles as will be useful to them in scientific studies. The importance of accurate observations and conclusions will be impressed.

2. **Heat.** Second year, spring term. Three hours per week. A thorough study of heat and the elements of thermodynamics.

3. **Magnetism and Electricity.** Fourth year, fall term. A thorough study of magnetism and electricity, with advanced laboratory practice.

4. **Sound and Light.** Fourth year, winter term. Advanced work on sound and light, with laboratory practice.

5. **Mechanics, Sound, and Heat.** Fourth year, fall term.

6. **Light and Electricity.** Fourth year, winter term.

7. **Electrical Measurements.** Fourth year, fall term. This course includes practice on the distribution of magnetism, effects of temperature upon magnetism, determination of resistance by various methods, of galvanometer constants, measurements of currents, and electromotive force.

8. **Dynamo-electric Machines.** Fourth year, winter term. This course consists of the study of the fundamental theory of such machines, of their various forms, and of the practical design and operation of electrical apparatus and machinery.

9. **Electrical Laboratory.** Fourth year, winter term. Advanced electrical testing—the efficiency of dynamos and motors, transformers, coefficients of self and mutual induction.

10. **Machine Design.** Fourth year, winter term. Practice in original designing based on the previous work.

11. **Applied Electricity.** Fourth year, spring term. Study and practice in the application of electricity to bells, telephones, annunciators, etc.

12. **Electric Power Transmission.** Fourth year, spring term. Lectures on central station design and management, electric traction, and transmission of power.

Preparatory Department.

Inasmuch as many students seek admission to the College with inadequate preparation in one or more of the subjects required for entrance, it has been found necessary to establish a preparatory department, in which such deficiencies can be remedied. The work in this department is under the direction of a principal, with whom are associated two assistants and a number of student assistants. Some of the preparatory classes are also conducted by the heads of the College departments. Instruction is given in all studies required for admission to the College. See terms of admission, page 83.

1. **English Grammar.** The aim is to lay a good foundation for the further study of English. Recognizing the fact that grammatical drill develops in students logical habits of thought, besides giving them greater command of language, special attention is given to the analysis and construction of sentences and to the principles of elementary composition. Two classes are formed each term, the B class completing the work in two terms; the A class in one term. Text, Lyte's Advanced Grammar and Composition.

2. **English Composition.** One term, based on Herrick and Damon's Composition and Rhetoric. The text is completed to part IV, special attention being given to the study of usage and diction. In addition to the work of the text, each student is required to write one composition each week, which, after being read before the class, receives corrections from the instructor in charge.

3. **Physiology.** This is elementary work, intended to prepare students for the more advanced work given in second year of the agriculture, domestic science and general science courses. As far as possible, models, skeletons and dissecting material is made use of in the classroom. Martin's Elementary Physiology is used as a text.

4. **Bookkeeping.** This is not an extended course, but sufficient instruction is given to enable the individual to open and close accounts in ordinary business transactions. Text, Stevenson.

5. **Arithmetic.** Instruction is given in the principles that underlie the various classes of problems, thus teaching the student to rely upon himself, not upon rules. Text, Belfield's New Model Arithmetic.

6. **Algebra.** This includes the fundamental operations, least common multiple, greatest common divisor, and simple equations of the first degree containing one unknown quantity, equivalent to 131 pages of the text, Wells's Higher Algebra.



STUDENTS' HERALD STAFF.

7. **United States History.** The leading facts, causes and sequences showing the growth of our country and national history are studied with a view to develop true patriotism. Text, McLaughlin's History of the American Nation.

8. **Other Branches of Study.** Instruction is also given in spelling, reading, writing, and geography.

Printing.

The printing department, in the main building, occupies six large rooms, viz.: Superintendent's office, composing-room, pressroom, folding room or bindery, stock-room, and storeroom, all well lighted, amply ventilated, and heated by steam.

1. **Instruction.** The lessons embraced may be briefly summarized under these suggestive topics: The elements of news, book and job composition and imposition; proof-reading and correcting; plain and color presswork; adaptation of various grades of inks and papers; newspaper and magazine folding; mailing; tableting of stationery, and pamphlet stitching and stapling. The instruction is of that character in which individual advancement is always taken into account, and opportunity is extended for individual growth in the knowledge of those principles which are of practical utility in the every-day work of a printing-office. Occasion for the gaining of experience and acquirement of skill is supplied by the weekly publication of the *Industrialist* and the *Students' Herald*, the execution of the wide range of job printing needed to furnish the various College departments with blanks, lesson outlines, and stationery, and the College societies with programs, notices, etc.; thus furnishing a greater range of work for instruction than is ordinarily found in the average printing-office.

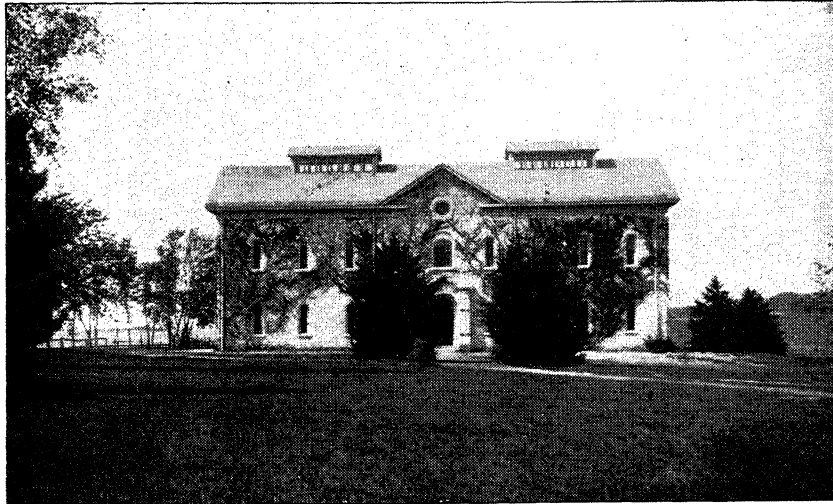
2. **Equipment.** Thirty pairs of cases; large fonts of six-point, eight-point and ten-point Roman type and italics; a good assortment of wood and metal job type and brass rule; a Babcock cylinder press and a new Liberty quarto-medium job press, run by electric motor; a Gordon eighth-medium job press; mitering, rule-curving and stapling machines; wire stitcher; paper-cutter, cabinets, stands, imposing stones, etc.

Veterinary Science and Bacteriology.

Of the subjects described below, all are required in the agriculture course, but only bacteriology in the general science and domestic science courses.

1. **Hygiene of Farm Animals.** Third year, fall term. As the name indicates, special attention is given, in this course, to the prevention of disease among farm animals, but the relations existing between the diseases of domestic animals and those of man are also carefully considered. Among the other subjects discussed may be mentioned, impurities of food and water and diseases resulting therefrom, parasites and parasitic diseases, examination of animals for purchase, disinfection, quarantining, etc.

2. **Bacteriology.** Third year, spring term, or fourth year, fall term. This course consists of a brief history of the development of bacteriology as a science; morphology and physiology of bacteria; the relation of external conditions to bacterial development; disinfection; bacteriological technique, description of apparatus used, preparation for culture media, cultivation and staining of bacteria; the rôle of bacteria in nature in relation to digestion, preservation of foods, nitrification, infection, etc. The students are required to do laboratory work, in which they study the cultural features and staining of bacteria. Must precede veterinary science. Lectures and laboratory work.



ARMORY AND VETERINARY SCIENCE.

3. **Comparative Anatomy.** Fourth year, fall term. This includes a study of the anatomy of the domestic animals, with special attention to the structure of those organs most frequently diseased. The course has in view the preparation of the student for a more complete understanding of the course in veterinary science proper, which follows, and also the fitting of him for judging live stock, success in which largely depends upon a correct knowledge of the structure and functions of the different parts of the animal body.

4. **Veterinary Science.** Fourth year, winter term. The aim of this course is by no means to make veterinary surgeons. This is absolutely impossible in so short a time. But with the studies in zoology, hygiene of farm animals, bacteriology and veterinary anatomy preceding the course of lectures on veterinary science, it is intended to make a young man thoroughly familiar with the ordinary causes of disease and the latest successful methods of avoiding and combating them. The common infectious diseases of farm animals are discussed in detail. The study of lameness of the horse will constitute part of the term's work. Most diseases of farm animals can be prevented by intelligent foresight. It is our aim to train young men to exercise this foresight. Lectures and recitations.

MEANS OF ILLUSTRATION.

The department is provided with a bacteriological laboratory fitted with apparatus, instruments and reagents for the study of this subject. An Azoux model of a horse, which is dissectible, showing nearly 1000 anatomical structures, skeletons, charts, and a large collection of anatomical specimens, showing healthy and diseased structures, are also provided for means of illustration in the teaching of veterinary science.

Zoology and Physiology.

Of the subjects described below, No. 1 is required of all young men; Nos. 2 and 3, in the general science, domestic science and agriculture courses.

1. **Hygiene.** First year, fall term. This course consists of one lecture per week, chiefly on personal hygiene.

2. **Physiology.** Second year, winter or spring term. This course is an introduction to human anatomy and physiology. The subject is studied in the usual systematic manner. Thus, the gross and microscopic structure of the various organs and tissues of the body is elucidated so far as possible in a practical manner. In this way the student is prepared to comprehend, in a measure, the various chemical and physical processes which take place in the body, and which constitute the subject-matter of modern physiology. This course must be preceded by elementary physiology (or its equivalent), chemistry 1, and elementary physics.

3. **Zoology.** Third year, fall, winter or spring term. This course is an introduction to the study of animals—their structure, functions, habits, origin, relationships, and classification. The student is first introduced to the simplest forms of animals, in which structure and function are expressed in their simplest terms. From the consideration of these he passes in a natural manner to the study of higher and more complex forms, thus obtaining a knowledge of the gradual differentiation of structure and correlative specialization of function so clearly illustrated by the study of types. Special attention is paid to animal ecology, *e. g.*, the relations of animals to their environment, effects of climate, soil, etc.; parasitism, commensalism, symbiosis; their rôle as causal factors in disease; natural and artificial selection; the interdependence of species, and the caution which must be observed in interference with these natural relations. This course must be preceded by organic chemistry and physiology.

4. **Histology.** Arrangements will be made (as soon as conditions will permit) to give instruction in microscopic technique, including the fixing, embedding, sectioning and staining of tissues; microscopic examination of blood and urine; micrometry, microchemistry, microphotography, and the use of the camera lucida. This course will be open to such students as have completed the foregoing courses (or their equivalent) in an exceptionally satisfactory manner.

MEANS OF ILLUSTRATION.

The zoölogical museum, containing numerous representatives of the several classes, especially full in fishes and mollusks of Kansas and in illustrations in economic and systematic entomology. Increasing material in skins, alcoholic and anatomical preparations are available also for the use of the student. An Auzoux manikin, which is dissectible, skeleton, papier-mache models, charts, etc., are used for demonstration. The library contains abundant literature for collateral reading. It is expected that adequate laboratory facilities will be provided in the near future.

Logic and Psychology.

1. **Logic.** Third year, winter term. The art of reasoning correctly is aided by a study of systematic logic, both deductive and inductive. Special prominence is given to methods for exact observation and experiment and correct principles of classification. The previous researches and experience of the students are made to illustrate these principles.

2. **Psychology.** Fourth year, spring term. A short course in psychology gives the general principles of intellectual and moral philosophy. Sensation, apperception, perception, memory, imagination, thought, feeling and volition are topics of explanation and analysis. Theories of right and wrong and correct principles of action are made the means of a clear understanding of individual responsibility, with special attention to personal rights and duties. Topics are assigned for research, to be presented in thesis form at the close of the term.

The Short Courses.

There are large numbers of young people who from lack of means or time are unable to take an extended course of study, but whose usefulness in the world would be much increased by a little special training. Their earning capacity in the household or on the farm is far from what it might be, and they are thus handicapped in the struggle for a livelihood. To bring to this large portion of the "industrial classes," even in small measure, the "liberal and practical education" provided for by the organic act, the College has established certain short courses of study, with practice.

The teaching in these courses, while no whit less accurate than in the others, is upon a different plane. Taking students without scientific or mathematical training, the instruction must be more largely a giving of facts, without an elaboration of the underlying principles which the regular courses afford. The work is intensely practical. Studying such texts as any bright young man or woman can understand, receiving lectures of the same type, and putting into daily practice through industrial exercises the facts and principles learned in the classroom, the student cannot but be greatly benefited. It is hoped, too, that in many cases young people who had thought that they could not afford a four-year course will, by this taste of the advantages and pleasures of an education, be led into the regular courses.

These courses are put at the seasons of the year which seem likely to accommodate the most students, those for young men being given in the winter term, when farm work is more slack, and the young women's course being in the fall. Four such courses are now offered: A dairy course of one winter term; a domestic science course of two fall terms; an agriculture-mechanics course and a horticulture-mechanics course of two winter terms. The last two courses are identical the first term, but in the second, one treats horticultural lines more exclusively and the other agricultural.

REQUIREMENTS FOR ADMISSION.

Persons at least eighteen years of age and of good moral character are admitted to these courses as follows:

Persons between the ages of eighteen and twenty-one will be admitted upon presentation of common-school diploma, grammar-school certificate, teacher's certificate, or high-school diploma, or upon passing an examination in the following subjects: Reading, writing, spelling, arithmetic, grammar, geography, physiology, and United States history. Persons over twenty-one will be admitted without examination, but should have sufficient education to enable them to understand the simple text-books used, and to handle readily problems in common and decimal fractions and percentage. They will be required to attend strictly and constantly to their duties, or leave. They have the same free use of the College library that other students have. Owing to the peculiar nature of the work and to the slight degree of preparation which it assumes, **students are required to be present at the very beginning of the course, and those applying later will not be admitted.**

The short courses are in no sense equivalent to the long courses, and no one should take a short course who can take a whole or even a part of one of the long courses. All of the common-school branches are taught each term; all of the first-year subjects, except elementary botany, which is not taught during the winter term, and nearly all of the second-year studies are taught each term; so that it is possible for one to get nearly all subjects of the first two years by attending during the winter terms only.

Dairy School Course.

ONE WINTER TERM, TWELVE WEEKS.

Principles of Agriculture, one-half term	} Hrs. per wk.	5
Dairy Bookkeeping, one-half term		
Dairying, one-half term	} one-half term	5
Creamery Butter-making, or		
Private Butter-making, or...		
Cheese-making		
Feeds and Feeding, one-half term	}	5
Breeds and Breeding, one-half term		
Bacteriology		3
Diseases of Dairy Animals		2
Boiler and Engine		5
Milk Testing and Private Butter-making, or ...	}	20
Milk Testing and Creamery Butter-making, or		
Milk Testing and Factory Cheese-making		

Principles of Agriculture. Treating of soils, crops, tillage, and manures; the selection, laying out, equipping and management of Kansas dairy farms. Text-book, Bailey's Principles of Agriculture.

Dairy Bookkeeping. Practice in bookkeeping that will enable the student to understand the underlying principles, followed by training in keeping books for farm, dairy and creamery accounts.

Dairying. Milk: its secretion, nature, and composition; causes and conditions influencing the quality and quantity of the milk; handling of milk for the market and for butter-making, including milking, straining, aerating, cooling, preserving, and shipping; creaming of milk by the separator; cream ripening and butter-making. Text-book, Wing's Milk and its Products. Lectures.

All students will study dairying together for the first half of the term. This class will then be divided, creamery men taking lectures on *creamery butter-making*, the cheese-makers on *factory cheese-making*, and the dairymen on *private butter-making*.

Feeds and Feeding. Properties of common feed stuffs, their effect on character and yield of milk and butter, and their adaptability to Kansas conditions of dairying. The compounding of dairy rations to secure good yields at least cost with products having desired qualities. Careful study of the feeding of the College dairy herd will also be required. Text-book, Henry's Feeds and Feeding.

Breeds and Breeding. Characteristics of leading breeds of cattle, and their adaptability to Kansas dairy farming; dairy farm, and the selection of dairy animals; care and management of the dairy herd; principles of stock-breeding; stock judging. Lectures.

Bacteriology. Relations of bacteria to methods of keeping milk, ripening cream and cheese, and flavoring butter; diseases of milk and their relations to the health of man and animal; principles of disinfection. Text-book, Russell's Bacteriology.

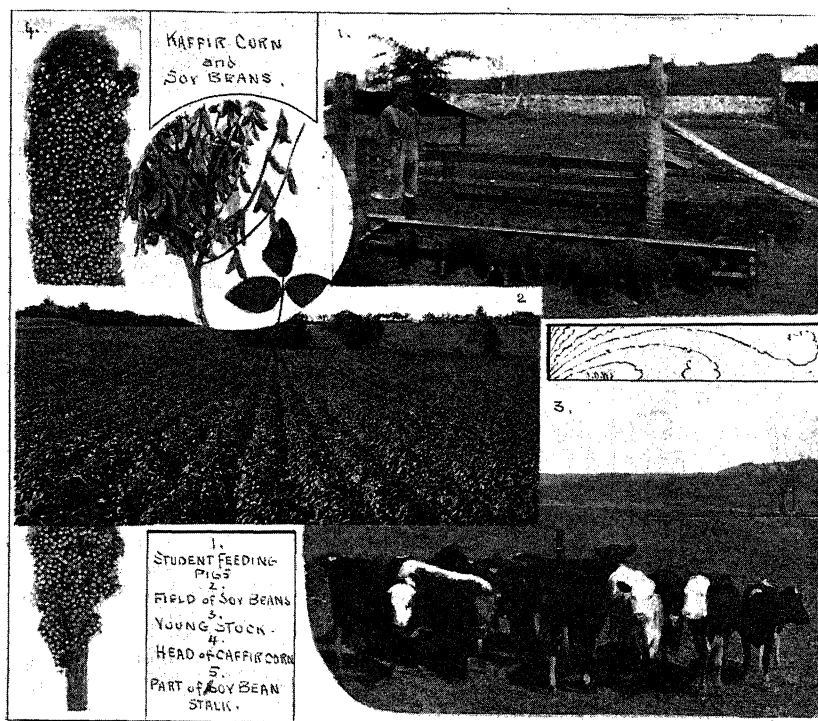
Diseases of Dairy Animals. The common ailments of calves and dairy cows are discussed, their causes and symptoms explained, and remedies and preventives suggested—all from a practical farmer's standpoint.

Boilers and Engines. Lectures and practice in the firing of boilers, care and running of engines, pumps, etc.; practice in shops in pipe-fitting, machine setting, soldering, etc.

Butter-making and Milk Testing. Practice in handling milk and its products from the time it leaves the cow until it is marketed as butter, cheese, or sanitary milk. Students may choose either creamery butter-making, cheese-making, or private dairying. Thorough instruction and practice will be given in all three of these lines. The dairy rooms are fully equipped with hand and power separators, Babcock tests, churns and butter-workers, aerators, heaters, sterilizers, milk and cream vats, factory-cheese apparatus, Mann's acid tests, and other needed apparatus. Many manufacturers have volunteered to loan us machinery, so that the dairy students may make tests of the work of the different makes of separators, churns, etc.

EXPENSES.

Tuition is free. Board and rooms can be secured for \$2.50 and upward per week; lunches may be had at the College dining-room at cost; laundry costs about fifty cents per week. Each student will need two white suits and caps for use in the dairy-room. These can be purchased in Manhattan. Unnecessary breakage will be charged at cost. Incidental expenses will be high or low, as the individual determines. The total of all expenses for the entire time, exclusive of railroad fare in coming and returning, need not exceed forty dollars, and with close economy may be made less. Students in the dairy course cannot expect to earn any part of their expenses while at the College, as every hour will be needed for class work, practice, or study.



Farmers' Short Course.

(A short course in agriculture, horticulture, and mechanics.)

FIRST YEAR, WINTER TERM, TWELVE WEEKS.

Hrs. per wk.

Feeds and Feeding.....	5
Horticulture, Entomology.....	5
Crop Production, Bookkeeping.....	5
Diseases of Farm Animals and Bacteriology.....	5
Fruit Propagation.....	5
Blacksmithing, Repairing.....	10
Science Lectures.....	1

SECOND YEAR, WINTER TERM, TWELVE WEEKS.

HORTICULTURE.

Vegetable-gardening and Small-fruit Culture.....	5
Orchard Treatment, Pomology.....	5
Diseases and Insects.....	5
Physics and Chemistry.....	5
Shops, Farm Carpentry, etc.....	10
Horticultural Practice.....	5
Science Lectures.....	1

AGRICULTURE.

Breeds and Breeding.....	5
Dairying, Farm Architecture.....	5
Botany.....	5
Physics and Chemistry.....	5
Shops, Farm Carpentry, etc.....	10
Farm Practice.....	5
Science Lectures.....	1

Feeds and Feeding. The properties of feed stuffs, and their combinations to secure good returns at least cost with products having the desired qualities; effect of foods on quality of products; construction of farm buildings and appliances to secure best returns from feed and for saving labor; a study of the feeding on the College farm. Text-book, Henry's Feeds and Feeding. Lectures.

Horticulture. General principles underlying plant growth; structure and functions of the various parts of the plants; nutrition, formation of seed, etc.; propagation by seedage, cuttage, graftage, and layerage; environment, including the effects of temperature, light, food, and water-supply; possibilities of improvement by cultivation, training, and selection. Text-book, Goff's Principles of Plant Culture.

Fruit Propagation. Practice work in the various methods of budding and grafting, and storing of the same; treatment of grafted stock during the winter and setting it in nursery rows in spring; the making of herbaceous and hardwood cuttings; winter treatment of tree seeds in preparation for spring planting.

Entomology. Nature, time and expense of the injuries from insect life, and a knowledge of the remedies, when and how to apply them. Structure of a number of insect types; study of the beneficial insects, and the more injurious forms attacking farm, orchard and garden crops. Use of preventives and insecticides.

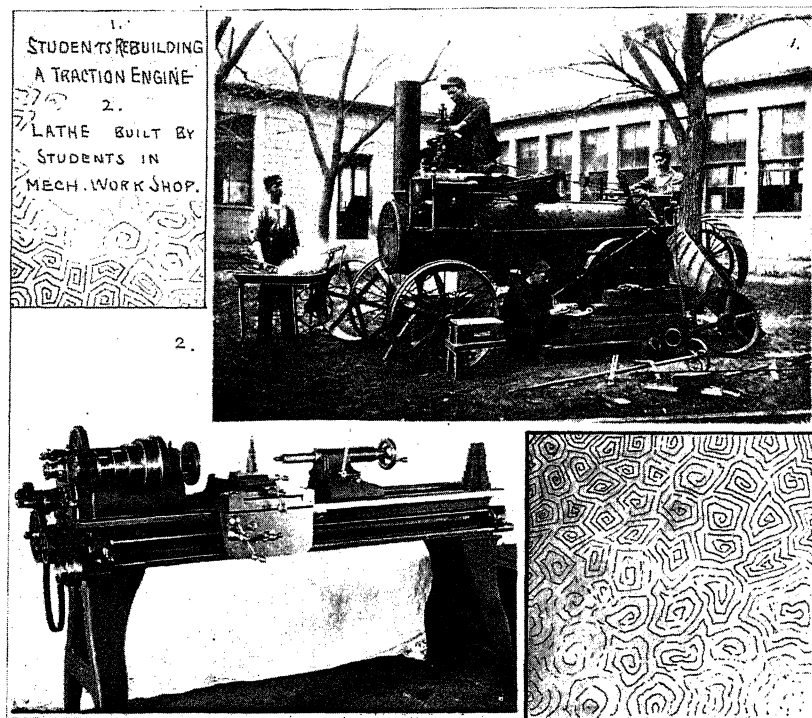
Crop Production. A study of the soil, the plant, and crop growing, including the management of the soil for maintaining and increasing its productivity, the improvement of worn-out soils, conservation of moisture and the preparation of the soil, selection of the seed, method of planting, treatment after planting and harvesting of Kansas field crops to secure best returns at least cost. Text-book, Bailey's Principles of Agriculture. Lectures.

Bookkeeping. The principles are mastered through their practical application to forms adapted to farm affairs. Each student keeps a regular set of books, in which accuracy and neatness are not less important than a correct understanding of principles. A set of books is developed which would be practical for every farmer, accounts being kept with various departments of his business—fields, granaries, garner, orchards, hogs, cattle, milch cows, etc.

Diseases of Farm Animals. The common ailments of farm animals are discussed, their causes and symptoms explained, and preventives and remedies suggested.

Bacteriology. Characteristics of bacteria; their relation to health and disease of man and animals, to soil fertility, and to quality of dairy products; principles and methods of disinfection.

Blacksmithing. Forging and welding, construction of singletree clips, wagon ironing, clevises, horseshoes, sharpening and tempering plows and tools, general repair work. Advanced work is also offered in the care and management of boilers and engines. If the student desires, he can make a forge and set of blacksmith tools to take home with him, paying only for the iron used.



Science Lectures. Lectures will be given both in the first and second years of the course by the instructors on subjects of most interest to the students in this course.

SECOND YEAR — AGRICULTURE COURSE.

Breeds and Breeding. Characteristics of the breeds of live stock and their adaptability to Kansas conditions; principles of breeding; form as an index of qualities; selection and judging of live stock. Lectures.

Dairying. Milk: its secretion, nature, and composition; causes and conditions influencing the quality and quantity of milk; handling of milk for the market and for butter-making, including milking, straining, aerating, cooling, preserving, and shipping; creaming of milk by gravity methods and by the sepa-

rator; cream ripening and churning; washing, salting, working, packing and marketing butter. Text-book, Wing's Milk and its Products.

Farm Architecture. Each student will be required to prepare plans, elevations, sections, detailed drawings and specifications of a sanitary farm barn, with outbuildings.

Botany. The laws of plant growth, which have a direct bearing upon the raising of grasses, grains, clovers, forage-plants, and weeds; a study of the common fungi that affect cultivated plants; seed testing; practical methods of farm seed breeding.

Physics. A consideration of the principles of physics which underlie farm operations, farm mechanics, control of soil moisture, physical laws of tillage, meteorology. A knowledge of the laws of physics enables the farmer to store moisture and to reduce loss of water from the soil by evaporation. It is the practical application of these laws that will solve our drought problem.

Chemistry. The simplest principles of chemistry, and their relation to soil, air, water, and food, are taught to as great an extent as the limited time will permit.

Farm Carpentry. Elementary woodwork in joinery and construction, followed by general woodwork and carpentry, care and use of farm machinery, the building of frame structures, such as stables, piggeries, poultry-houses, ice-houses, and farm creameries, will be given both by lectures and by practical work.

SECOND YEAR—HORTICULTURE COURSE.

Vegetable-gardening and Small-fruit Culture. The first half of the term is devoted to vegetable growing, consideration being given to the raising of vegetables for home and market; locations, soils, fertilizers, tools, irrigation, etc., best suited for crops grown in kitchen- and market-gardens; the growing of extra early or late crops, their special treatment, cultivation, and harvesting; the means employed in the preservation of vegetables for future use; vegetables suited to Kansas conditions, methods of improvement, etc. Small-fruit culture occupies the second half of the term. The subject is treated in much the same manner as vegetable-gardening, taking up the cultivation of small fruits and the methods employed in their propagation, handling, and improvement. Five hours per week. Lectures.

Orchard Treatment and Pomology. This branch is devoted to the practical treatment of orchard work; location, soil, planting, pruning, cultivation and fertility of the orchard; a study of the use and value of windbreaks—how best made, trees suitable for same in Kansas; causes of plant variation, and methods employed in the improvement of orchard fruits; grape growing in the West, a study of the distinctive characteristics of varieties, their value for home and market use; lists of varieties of fruits suitable for Kansas orchards; a general treatment of planning the grounds, location of houses, barns, gardens, orchards, lawns, fields, etc. Five hours per week. Text-book, Bailey's Principles of Fruit-growing. Lectures, with library references.

Orchard Diseases and Insects. The work of this branch is the investigation of various orchard pests. Life-history and depredations of insects and fungous diseases attacking horticultural crops, together with means of combating them, preventives, and remedies; mechanical devices, spraying compounds and machinery, and methods employed in the warfare.

Chemistry and Physics. In classes with the agriculture course.

Domestic Science Course.

FIRST YEAR, FALL TERM, TWELVE WEEKS.		<i>Hrs. per wk.</i>
Lectures and Practice in Cooking.....		15
Home Sanitation and Household Accounts.....		1
Sewing.....		16
<i>Drawing</i>		5
<i>Vegetable-gardening and Floriculture</i>		5

SECOND YEAR, FALL TERM, TWELVE WEEKS.		<i>Hrs. per wk.</i>
Lectures and Practice in Cooking and Home Nursing.....		10
Bacteriology and Physiology.....		2½
Physics one-half term, }		5
Chemistry one-half term }		
<i>Dressmaking</i>		12

Lectures and Practice in Cooking. This work includes the following topics: The origin and purpose of cooking, and the effects of heat and cold upon starch and albumen; direct application of the principles learned to the cookery of eggs, vegetables, beverages, and soups; the general cookery of meats, with study of the meat charts; baking-powders, their composition and adulteration; yeast, and bread-making by fermentation.

Drawing. The work in drawing is especially adapted to the needs of this class of students; it will consist of free-hand and geometrical drawing.

Sanitation and Household Accounts. Care of the kitchen, living-rooms, sleeping-rooms, dining-rooms, etc., including the cleaning of kitchen utensils and lamps, sweeping, dusting, and care of plumbing. A simple method of keeping accounts of receipts and expenditures will be given.

Sewing. Pupil makes a model book covering the full course in hand sewing, and consisting of basting, gathering, darning, patching, etc. Machine practice, drafting, cutting and making underskirt and drawers; drafting, fitting and making dress without lining; cutting and making corset cover and night-dress. Materials for the model work will be furnished by the College. Each pupil will furnish her own material for the garments, but if sufficient proficiency is shown in making the first garment, pupils may be allowed to take orders for the others.

Vegetable-gardening and Floriculture. The first half of the term is devoted to vegetable growing. Subjects treated include the raising of vegetables for home and for market, with location, soils, manures, tools, irrigation, etc., best suited for crops grown in kitchen- and market-gardens; the construction and manipulation of hotbeds, cold-frames, and winter gardens; the growing of early and late crops, their special treatment, methods of cultivation, planting, transplanting, harvesting, and marketing; a study of varieties suitable to local conditions; and the origin, nature and methods of improvement of vegetables. The last half of the term is devoted to floriculture. Lectures in the classroom are supplemented by practical exercises in the greenhouses and gardens, treating of the propagation and culture of flowers, including the treatment of seeds, cuttings, mixings of soils, potting, repotting, watering, cut flowers, packing, and the many operations that attend amateur and commercial flower-gardening.

SECOND YEAR, FALL TERM, TWELVE WEEKS.

Lectures and Practice in Cooking and Home Nursing. The following subjects are taken up: The food principles and their classification; the uses of food in the body; canning and preserving; cookery of the various combinations made with eggs, thus involving the application of heat to albumen; simple

chemistry of bread-making, rolls, puddings, etc.; practical lessons in frying and in cookery of salads, plain pastry, dessert, and cake; a series of six lessons in invalid cookery, including gruels, toast, beef tea, soups, eggs, and milk; and six lessons in home nursing.

Physics. The subjects of mechanics, sound, heat, light and electricity will be briefly treated by lectures, especial attention being given to heat in its relation to cooking, ventilation, etc.

Chemistry. By means of lectures, accompanying a simple text-book, the attempt is made to give the students some idea of the nature of chemical action, and to impart the facts most directly bearing upon cleaning, sanitation, cooking, and nutrition.

Bacteriology. Brief history of bacteriology. External conditions that affect bacteria. Disinfection; how to prevent spread of infectious diseases.

Physiology. Physiology and hygiene of the human body; laws of health and care of the sick.

Dressmaking. Pupil will be taught the use of a dress-cutting system, cutting, fitting and making woolen dress. Pupil must furnish her own material, and cut and make a dress for herself.

Apprentice Courses.

MECHANICAL DEPARTMENT.

Many who are unable to take the four-year engineering course and who wish to learn a trade will find in the apprentice courses opportunities to obtain practical skill in carpentry, blacksmithing, foundry, machine-shop practice, and boiler and engine attendance.

In the apprentice courses the advantages of the shops are offered free to a limited number of young men who cannot enter regularly in the College classes. Since instruction rather than money-making is the object of these courses, it can be readily seen that the apprentice work under skilled instructors offers many advantages over the ordinary trade apprenticeship. The number that can be accommodated for the coming year is estimated at thirty, and the work given is of the most practical character.

REQUIREMENTS FOR ADMISSION.

Persons at least eighteen years of age and of good moral character are admitted, as follows:

Persons between the ages of eighteen and twenty-one will be admitted upon presentation of common-school diploma, grammar-school certificate, teacher's certificate, or high-school diploma, or upon passing an examination in the following subjects: Reading, writing, spelling, arithmetic, grammar, physiology, and United States history. Persons over twenty-one will be admitted without examination. Their taking one of the regular four-year courses must be obviously impracticable; must observe College regulations; must agree to work at least thirty hours per week in the shops, and must remain in the shops for a minimum period of eighty weeks. No charge of any kind is made, nor is any pay given to apprentices. All apprentices are taken on one month's trial, that those not naturally suited for such work may be relieved of the necessity of remaining the full period. Graduates of these courses are given a certificate showing proficiency in line of work pursued.

Courses are offered in the following lines:

- | | |
|---------------------|-----------------------------|
| a. Machine-shop. | d. Foundry. |
| b. Blacksmith shop. | e. Boiler- and engine-room. |
| c. Carpenter shop. | |

PRINTING DEPARTMENT.

Persons may enter the printing department under the same requirements as above. The work consists of composition, proof-reading, press and job work.

The Young Men's Christian Association.

The Young Men's Christian Association, having a membership of over 400, is one of the largest and most influential student organizations of the College. The association is thoroughly organized for practical Christian work, and exerts a most wholesome influence in the College.

When a young man gets off the train at Manhattan he finds a committee from the Young Men's Christian Association ready to help him find a desirable boarding place, and to assist him, in every way possible, to make his college life both pleasant and profitable.

The nature of the work of the association may be briefly indicated by the following quotation from the back of a membership application blank.

Reasons for Joining the Y. M. C. A.

I.—BECAUSE OF WHAT IT STANDS FOR:

- Clean Christian manhood in the College.
- Growth into a larger and more spiritual Christian life.
- "Practical Christianity": Rendering material assistance in every way possible.
- Aggressive Christian work by and for students.

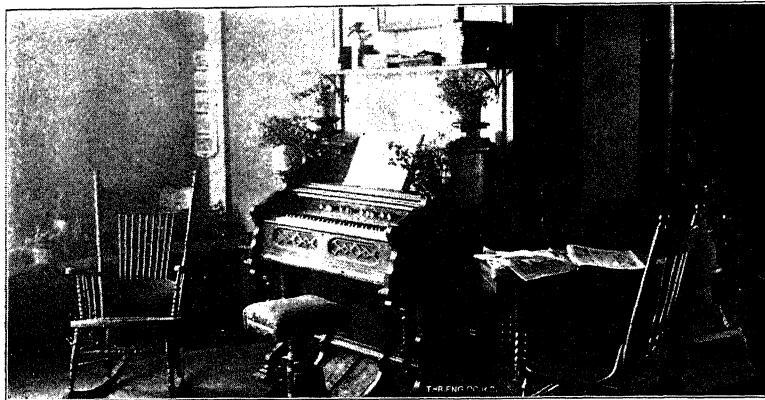
II.—BECAUSE OF WHAT IT OFFERS YOU, AND ALL OTHER YOUNG MEN OF THE COLLEGE:

- Attractive and profitable religious meetings.
- The use of a homelike parlor, together with an organ, where you may go evenings and Sunday afternoons when you feel lonely and cannot study.
- A sick-room, where you will be placed and taken care of when you need such attention.
- Opportunities of fellowship and frequent social gatherings.
- Two courses in Bible study.
- Classes in the study of modern missions.
- The opportunity of doing Christian work among your fellows.
- Free tutoring when needed and deserved.
- Free employment and general information bureau.
- Students' loan fund, for helping worthy students out of tight places.
- A loan library of text-books.
- The most valuable and helpful handbook in the West.
- A membership ticket which will secure for you special courtesies and privileges in all the leading city, railroad and college associations on the continent.
- The brotherly sympathy and advice of the general secretary in regard to any difficulty that you may have.

III.—BECAUSE OF WHAT IT IS:

- The largest student organization in the College.
- The largest intercollegiate organization in existence.
- An organization heartily supported by the Faculty.
- An organization in good financial condition.
- An organization that keeps out of College politics.
- An organization that has in its membership the most prominent men in College, and men from all classes of students.

All young men contemplating entering college are invited to write to the general secretary of the association for all kinds of information regarding the College, and especially in regard to the work of the Y. M. C. A.

*Young Women's Christian Association.*

The Young Women's Christian Association of the Kansas State Agricultural College was organized in 1886, and in 1900-'01 had a membership of eighty-two, made up of ladies of the Faculty and young women of the various classes.

The object of the association is to look after the general welfare of the girls who attend the institution and to give them any assistance needed. The work of the association begins by meeting the new girls at the train and helping them to secure the best and most homelike boarding places, at reasonable rates. Guides are supplied to show new students to their respective classrooms until familiar with the buildings.

To the young woman away from home for the first time questions arise which the older and more experienced student will be able to solve, and help in solving these problems is cheerfully given. The idea of each association member is to make each new girl feel at home in the College and the association rooms, and feel that when she meets a Y. W. C. A. girl she meets a friend who is interested in her welfare.

The association looks after girls in case of sickness, and, where the sickness is severe, nurses are detailed from the members to look after the patient as long as a nurse's services are required.

Each Saturday at the noon hour a meeting is held for discussion of plans and work of the association. Socials are held from time to time to enable the young women of the College to become better acquainted.

In the Domestic Science Hall is the office of the general secretary and a general headquarters of the association. This office and reading-room is supplied with papers and magazines, and here any girl may spend a vacant hour with a short story or a scientific article, being assured she is a welcome visitor.

Each year the officers of the association receive letters from parents or friends of prospective students asking that care in certain lines be given. These cases always receive special care.

Last year the work of the association enlarged, so that it demanded more time than the students could give; so a young woman was employed to act as general secretary. When help of any kind is needed application may be made to this general secretary, who will be willing to do anything she can.

Any young woman who contemplates attending the Kansas Agricultural College, and who wishes information such as the catalogue cannot give, may write to the general secretary, Y. W. C. A., Manhattan, Kan.



General Information.

Terms of Admission.

Persons over fourteen years of age will be admitted in any of the following ways:

1. Kansas teacher's certificate, provided no subject is below seventy per cent.
2. Diploma received on completion of a county course of study which has been approved by the Faculty.
3. Certificate of passing the grammar grade or diploma from the high school of any city or county with a course of study approved by the Faculty.
4. Pass a satisfactory examination in reading, spelling, writing, geography, arithmetic, United States history, English grammar, and physiology.

Persons over eighteen years of age will be admitted to the preparatory classes if unable to pass the common-school branches.

Full admission to the first year, in addition to the common-school branches—reading, spelling, writing, geography, arithmetic, United States history, English grammar, and physiology—requires book-keeping, English composition, and algebra through simple equations of one unknown quantity. It is quite possible for a good student who enters somewhat behind to make up his deficiency in a year or two and graduate in four years.

All of the preparatory studies are taught each term; and of all the first-year studies except botany, which is not taught during the winter term, and nearly all of the second-year subjects are taught each term; so that a person may enter at the beginning of any term and find work suited to his advancement.

Examinations for admission are held at the beginning of each term. Applicants at other times during the school year have special examinations. These examinations are chiefly written, and a grade of seventy per cent., at least, must be obtained to pass a study.

On entrance, applications for advanced standing in the courses or for credit for certain studies of the courses may be made to the chairman of the committee on examinations. After entrance, such applications should be made to the professor in charge of the study. In any case the applicant will be required to pass such an examination as the professor in charge deems necessary.

The courses of the following cities and counties have been approved by the Faculty, and others may be submitted at any time:

CITIES.

Abilene.	Coffeyville.	Hiawatha.	Lyons.	Pratt.
Alma.	Columbus.	Holton.	Manhattan.	Russell.
Anthony.	Concordia.	Horton.	Mankato.	Salina.
Argentine.	Council Grove.	Humboldt.	Marion.	Scranton.
Arkansas City.	Dexter.	Hutchinson.	McPherson.	Sedan.
Atchison.	Dodge City.	Independence.	Minneapolis.	Seneca.
Augusta.	El Dorado.	Iola.	Neodesha.	Solomon City.
Baldwin.	Ellsworth.	Junction City.	Newton.	St. Mary's.
Belleville.	Emporia.	Kanopolis.	Olathe.	Topeka.
Beloit.	Eureka.	Kansas City.	Osage City.	Valley Falls.
Burlingame.	Fort Scott.	Kingman.	Osborne.	Wamego.
Burlington.	Fredonia.	La Cygne.	Oswego.	Washington.
Caldwell.	Garden City.	Larned.	Ottawa.	Waverly.
Chanute.	Garnett.	Lawrence.	Paola.	Wellington.
Cherryvale.	Gaylord.	Leavenworth.	Parsons.	Wellsville.
Chetopa.	Girard.	Lebo.	Pittsburg.	Winfield.
Clay Center.	Great Bend.	Lincoln.	Pomona.	Wichita.
Clifton.				

COUNTIES.

Allen.	Elk.	Kingman.	Phillips.	Shawnee.
Barber.	Ellis.	Labette.	Pottawatomie.	Sherman.
Bourbon.	Ellsworth.	Lane.	Pratt.	Smith.
Chautauqua.	Franklin.	Lincoln.	Reno.	Thomas.
Cheyenne.	Geary.	Logan.	Republic.	Trego.
Clay.	Gove.	Marion.	Rice.	Wabaunsee.
Cloud.	Greeley.	Miami.	Riley.	Wallace.
Coffey.	Harper.	Mitchell.	Rooks.	Washington.
Comanche.	Harvey.	Morris.	Rush.	Wilson.
Cowley.	Jefferson.	Nemaha.	Russell.	Woodson.
Decatur.	Jewell.	Norton.	Scott.	Wyandotte.
Douglas.	Johnson.	Ottawa.		

COUNTY HIGH SCHOOLS.

Atchison and Dickinson.

Counties and cities on the accredited list may be called upon at any time to furnish evidence that they are maintaining a satisfactory standard of scholarship.

Students should make every effort to enter on the first day of the term. Those entering later will be at a serious disadvantage, and if more than two or three weeks late should expect to take review work or fewer studies. If unable to enter before mid-term it will be better to wait until the next term.

Hospitants.

That mature persons not able to attend College continuously may nevertheless be able to enjoy, in a measure, the privileges of the institution, an invitation has been extended to all citizens of Kansas who may be so disposed to visit the College, its lectures, laboratories, library, shops, and various departments, and to avail themselves as fully of its advantages as may be consistent with their wishes, with the needs and duties of the regular students, and with the harmonious and successful working of the institution. Following are certain rules concerning hospitants:

Persons regularly attending any of the classes of the Kansas State

Agricultural College, without assuming the regular duties of students, will be known as hospitants, and—

1. Must be persons of mature age, whose attendance on regular College duties is obviously impracticable.
2. Must be properly enrolled at the President's office.
3. May attend any of the regular classes of the institution, subject to the same regulations, with regard to punctuality and attendance, as are imposed upon regular students, except as to recitations and examinations.
4. May use the library, as regular students.
5. Are not entitled to laboratory privileges without special recommendation of the professor in charge and the permission of the Faculty.

Examinations.

Examinations for admission are held at the beginning of each term, as shown in the calendar of the college year. Applicants at other times during the school year have special examinations. These examinations are chiefly written, and a grade of seventy per cent., at least, must be obtained to pass a study.

Examinations in the courses are held twice each term, as announced in the calendar. The results of these examinations, marked on a scale of 100, are combined with the grades of the preceding daily exercises into a grade for the period. Grades reported to the Secretary for record are made up by giving the mid-term record a value of one-third and the record for the last half of the term a value of two-thirds. For passing a study, the mean grade so calculated, and also the grade for the last half of the term, must be at least seventy. Any student receiving less than a passing grade on two or more studies may be required to drop back or withdraw from the College. Any student may receive a certificate of standing, upon leaving College at the close of a term.

Students deficient in entrance studies must make good such deficiencies before entering on the work of the second year. Students are not catalogued in the third-year class unless all deficiencies of the preceding years are provided for. Candidates for graduation must make good all deficiencies before entering on the work of the spring term of the fourth year. No student is considered as a candidate for graduation who, after the opening of the fall term, is deficient more than three full studies in addition to regular work. Extra work is not allowed to any student who failed in any branch the preceding term, or whose average grade for all branches was less than 80.

After entering college, students are allowed special examinations only upon recommendation of the professor in charge, and by permission of the committee on assignments. Permission for examina-

tion in studies not pursued with a class must be obtained at least two months before the examination is held. All such examinations are held under the immediate supervision of the professor in charge, and are thorough and exhaustive. Students desiring credit for work done elsewhere must bring certificates and catalogues to show that the work done is equivalent to ours.

Regulations in Regard to Substitutions.

With the five regular courses that the College now offers, most of the requirements of students are met. For one reason or another, however, some students find it necessary or desirable to substitute something else for the work that their respective courses would require. To place such substitutions on a systematic basis, the following regulations have been adopted by the Faculty:

1. Substitutions shall, as far as practicable, give training similar to that of the work displaced.

2. No student shall be allowed a substitution for work in which he has failed.

3. Unless made necessary by the acts of the Board of Regents or of the Faculty, substitutions shall not be allowed: (a) To students who are below the third year; (b) to students who have failed in any study of the two terms' work immediately preceding; (c) unless arranged for in advance.

4. Students desiring to substitute other work for any requirement in their respective courses of study must present written requests to the committee on assignments.

5. When a request for substitution is made by any student, the committee on assignments shall consult with all of the professors whose work is touched by the proposed substitution, and if unable to agree with them the case shall be submitted to the Faculty.

6. All substitutions arranged by the committee on assignments shall be reported to the Faculty by posting on the Faculty bulletin-board, and if not objected to within one week shall be reported to the Secretary for record in the students' register.

General Duties and Privileges.

General good conduct, such as becomes men and women anywhere, is expected of all. Every student is encouraged in the formation of sound character by both precept and example, and expected, "upon honor," to maintain a good repute. Failure to do so is met with prompt dismissal. No other rules of personal conduct are announced.

Classes are in session every week-day except Monday, and no student may be absent without excuse. Students cannot honorably leave the College before the close of a term, unless excused beforehand. A

full and permanent record of attendance and scholarship shows to each student his standing in the College.

Chapel exercises occupy fifteen minutes before the meeting of classes each morning, and absence from them is noted.

Every Saturday, at 1:30 P. M., the whole body of students gathers for a public lecture, or for rhetorical exercises of the third- and fourth-year classes.

Systematic training in gymnastic and calisthenic exercises is provided for both young men and young women, under teachers appointed by the College.

There are four prosperous literary societies, which meet weekly in rooms set apart for their use. The Alpha Beta, open to both sexes, and the Ionian, for young women, meet Saturday afternoon. The Webster and the Hamilton admit to membership young men only, and meet on Saturday evening.

At various times during the year the College halls are opened for social or literary entertainments for the whole body of students, or for classes. For the last four years the students have organized and presented courses of entertainments, which have been of high value, and of a moderate expense to each individual.

Earning One's Way.

The courses of study are based upon the supposition that the student is here for study, and a proper grasp of the subjects cannot be obtained by the average student unless the greater part of his time is given to college duties. Students in straightened circumstances are encouraged and aided in every way possible, but unless exceptionally strong, both mentally and physically, are advised to take lighter work by extending the course, if obliged to give any considerable time to self-support. As a rule, students should be prepared with means for at least a term, as some time is necessary for one to make acquaintances and learn where work adapted to him may be had. Sometimes arrangements may be made in advance.

The lines in which employment may be had are various. The College itself employs student labor to the extent of about \$900 per month, the rate paid being ten cents per hour. This work is on the farm, in the orchards and gardens, in the shops and printing-office, for the janitor, etc. As one's ability and trustworthiness become established, more responsible and more remunerative work may be had, to a limited extent. Many students obtain employment in the town; some work for their board in families in town or in the country near the College. Labor is everywhere respected, and the student who earns his way is honored by all. He will necessarily have little time for the lighter pleasures that may be incident to college life.

Expenses.

Tuition is free to all, irrespective of residence in Kansas; and no fee for incidental or contingent expenses is charged. Board and washing are not furnished by the College. Board, with furnished room, can be procured in private families at from \$2.50 to \$3.50 per week, or table board in student clubs from \$1.50 to \$2.25 per week. Furnished rooms, without board, can be obtained at from \$3.50 to \$5 per month. Some students board themselves at even less cost, and rooms for the purpose can be obtained at a rent of from \$1 to \$3.50 a month. Washing costs from 50 cents to \$1 a dozen pieces. Ordinary expenditures, aside from clothing and traveling expenses, range from \$100 to \$200 a year. No institution in the state furnishes an education at less cost to the student.

Business Directions.

General information concerning the College and its work, studies, examinations, grades, boarding places, etc., may be obtained from the President or the Secretary.

Questions, scientific or practical, concerning the different departments of study or work, may be addressed to the several professors and superintendents.

Loans upon school-district bonds are to be obtained from the Loan Commissioner.

Bills against the College should be presented monthly, and, when audited, are paid from the office of the Treasurer.

All payment of principal and interest on account of bonds or land contracts must be made to the state treasurer, at Topeka. Applications for extension of time on land contracts should be sent to the Secretary of the Board of Regents, at Manhattan.

The *Industrialist* may be addressed through Pres. E. R. Nichols, managing editor.

Donations for the library should be sent to the Librarian; donations for the museum, to the chairman of the committee on museums.

Applications for farmers' institutes should be made as early in the season as possible, addressing Institute Department, Kansas State Agricultural College.

Applications for the publications of the Experiment Station, and general inquiries concerning its work, should be addressed to Agricultural Experiment Station; but correspondence concerning special lines of investigation should be sent to the member of the Council in charge of such work.

Students.

POSTGRADUATES.

CANDIDATES FOR MASTER'S DEGREE, 1901.

- Flora (Day) Barnett, B. S. '95.....*Domestic Science, English.*
Manhattan, Riley county.
- Albert Dickens, B. S. '93.....*Horticulture, Botany, Entomology.*
Manhattan, Riley county.
- Marian Elizabeth Jones, B. S. '96.....*Domestic Science, Chemistry, Bacteriology.*
Manhattan, Riley county.
- Albert Thomas Kinsley, B. S. '99.....*Veterinary Science, Zoology, Physiology, Chemistry.*
Manhattan, Riley county.
- Mary Eliza (Lyman) Otis, B. S. '94....*Domestic Science, Chemistry.*
Manhattan, Riley county.
- Jesse Baker Norton, B. S. '97.....*Botany, Entomology, Drawing.*
Manhattan, Riley county.
- Kate Anna Manly, B. S. '99.....*Domestic Science, Bacteriology, Literature, History.*
Manhattan, Riley county.
- Josephine Hannah Wilder, B. S. '98....*Domestic Science, Drawing, Bacteriology, Literature, German.*
Manhattan, Riley county.

NON-RESIDENT.

- Phillip Fox, B. S. '97.....*Physics, Chemistry, Mathematics, Drawing.*
Salina, Saline county.

IN COURSE LEADING TO MASTER'S DEGREE.

- Lizzie Jane Agnew, B. S. '00.....*Domestic Science.*
Yates Center, Woodson county.
- Samuel I. Borton, B. S. '90.....*Horticulture, Entomology.*
Hilltop, Greenwood county.
- Josephine Finley, B. S. '00.....*Domestic Science.*
Randolph, Riley county.
- George Ogden Greene, B. S. '00.....*Horticulture, Botany.*
Lincoln, Lincoln county.
- Ina Emma Holroyd, B. S. '97.....*Domestic Science.*
Manhattan, Riley county.
- Harriet Grace Nichols, B. S. '98.....*Physics, Mathematics.*
Liberal, Seward county.
- Mary Bly Pritner, B. S. '99.....*Domestic Science, Chemistry.*
Keats, Riley county.
- Delmer William Randall, B. S. '99.....*Engineering, Mathematics, Physics.*
Manhattan, Riley county.
- Gertrude Elizabeth Rhodes, B. S. '98....*Domestic Science.*
Manhattan, Riley county.
- Clara Spilman, B. S. '00.....*Domestic Science.*
Manhattan, Riley county.
- Elsie Lucile Waters, B. S. '98.....*Domestic Science.*
Keats, Riley county.

NON-RESIDENT.

- Elmer George Gibson, B. S. '96. *Agriculture, Horticulture.*
Stockdale, Riley county.
- Gertrude Julia (Havens) Norton, B. S. '96, *Domestic Science, Botany.*
St. Louis, Mo.
- Guy Dudley Hulett, B. S. '98 *Bacteriology, Chemistry.*
Kirksville, Mo.
- Edward Clarence Joss, B. S. '96. *Veterinary Science.*
Chicago, Ill.
- Roscoe Townley Nichols, B. S. '99 *Bacteriology, Chemistry, Physiology.*
Liberal, Seward county.
- Schuyler Nichols, B. S. '98. *Bacteriology, Zoology, Physiology,*
Liberal, Seward county. *Chemistry.*
- Anna Louisa Streeter, B. S. '99. *Domestic Science.*
Milford, Geary county.

IN ADVANCED WORK NOT LEADING TO A DEGREE.

- Morrison Carpenter Adams, B. S. '99. *Philosophy of Education.*
Marvin, Phillips county.
- Charles McClain Correll, B. S. '00. *Philosophy of Education.*
Manhattan, Riley county.
- Inga Josephine Dahl, B. S. '98 *Philosophy of Education, Music,*
Webber, Jewell county. *Sewing.*
- James William Harner, B. S. '00. *History of Education, Philosophy of*
Manhattan, Riley county. *Education.*
- Eusebia (Knipe) Curtis, B. S. '90. *Domestic Art.*
Council Grove, Morris county.
- Mrs. Winifred Woodside Metcalf, O. M. (Emerson College of Oratory), *Logic,*
Manhattan, Riley county. *History of Education.*
- Mary Augusta Norton, B. S. '97. *Drawing.*
Manhattan, Riley county.
- Hilda Sophia Olson, B. S. '97. *Philosophy of Education, Music,*
Manhattan, Riley county. *Sewing.*
- Kate Paddock, B. S. '00. *Domestic Science.*
Manhattan, Riley county.
- Ernest Byron Patten, B. S. '98 *Bacteriology.*
Silver Lake, Shawnee county.
- Alice Myrtle Shofe, B. S. '97 *Oratory.*
Manhattan, Riley county.
- Laura Helen Trumbull, B. S. '00 *Philosophy of Education.*
Manhattan, Riley county.
- Adelaide Frances Wilder, M. S. '00. *Chemistry, Music, Sewing.*
Manhattan, Riley county.

FOURTH YEAR.

Name.	Post-office and county (or state).
Delmer Akin,	Manhattan, Riley.
Cyrus Norton Allison,	Florence, Marion.
Edna De Haven Barnes,	Birmingham, Alabama.
George Ford Bean,	Alma, Wabaunsee.
Loua Adelle Blachly,	Manhattan, Riley.
Bessie Sarah Bourne,	Delphos, Ottawa.

Name.	Post-office and county (or state).
Harry S. Bourne,	Delphos, Ottawa.
Martha Amelia Briggs,	Briggs, Geary.
Charles Jay Burson,	Niotaze, Chautauqua.
Howard Frank Butterfield,	Manhattan, Riley.
Emma M. Cain,	Clay Center, Clay.
Edwin Charles Cook,	Oakley, Logan.
Ina Foote Cowles,	Sibley, Douglas.
Trena Dahl,	Webber, Jewell.
Fannie Rachel Ellen Dale,	Manhattan, Riley.
Herman August Dieball,	Alma, Wabaunsee.
Edgar Willis Doane,	Louisville, Pottawatomie.
Charles Eastman,	Ogden, Riley.
Otto H. Elling,	North Cedar, Jefferson.
Vollie M. Emmert,	Blue Rapids, Marshall.
Rainey Faris,	Denison, Jackson.
Harry Haines Fay,	Wilsey, Morris.
Fred Fockele,	Le Roy, Coffey.
Louisa Gerteis,	Derby, Sedgwick.
Maude Hart,	Manhattan, Riley.
Fred Willis Haselwood,	Clifton, Clay.
Henrietta Mattie Hofer,	Manhattan, Riley.
Floyd James Howard,	Fulton, <i>Oklahoma</i> .
Minnie Howell,	Manhattan, Riley.
Edith Huntress,	Manhattan, Riley.
Fred M. Johnson,	Marysville, Marshall.
Louis Berten Jolley,	Manhattan, Riley.
Helen Knostman,	Manhattan, Riley.
Daniel Ladd,	Manhattan, Riley.
Raymond George Lawry,	Manhattan, Riley.
Erma Elizabeth Lock,	Riley, Riley.
Harvey McCaslin,	Barnes, Washington.
Madge Ruth McKeen,	Manhattan, Riley.
John A. McKenzie,	Solomon, Saline.
George Martinson,	Randolph, Riley.
Walter Eldridge Mathewson,	Topeka, Shawnee.
Emma Maude Miller,	Milford, Geary.
Margaret Jane Minis,	Manhattan, Riley.
Clarence William Morgan,	Hillside, Phillips.
Eugene Lawrence Morgan,	Hillside, Phillips.
Ruth Atwill Mudge,	Manhattan, Riley.
Jessie May Mustard,	Manchester, Dickinson.
Fred Myers,	Marquette, McPherson.
Martha Nitcher,	Ottawa, Franklin.
John H. Oesterhaus,	Junction City, Geary.
Carrie Bell Oneel,	Manhattan, Riley.
Helena Maude Pincomb,	Merriam, Johnson.
Bryant Poole,	Briggs, Geary.
Harry Paul Richards,	Manhattan, Riley.
Leroy Rigg,	Marvin, Phillips.
William Stephen Sargent,	Riley, Riley.
Maud Sauble,	Florence, Marion.

Name.	Post-office and county (or state).
Charles A. Scott,	Westmoreland, Pottawatomie.
Anna Louisa Smith,	Ottumwa, Coffey.
Adelaide Strite,	Ogden, Riley.
Anna Odette Summers,	Waterville, Marshall.
Lucy A. Sweet,	Stockdale, Riley.
Perrin K. Symns,	Atchison, Doniphan.
Stella Mae Tharp,	Winfield, Cowley.
Myrtie Lucy Toothaker,	Wheaton, Pottawatomie
Helen Castle True,	Vera, Wabaunsee.
Harry Castle Turner,	Rock Creek, Jefferson.
Florence Helen Vail,	Manhattan, Riley.
D. Blaine Vosburg,	Thayer, Neosho.
Mary Caroline Wagner,	Enterprise, Dickinson.
Elanor Mary White,	Newton, Harvey.
Katharena Winter,	Manhattan, Riley.
Lucie Joan Wyatt,	Westmoreland, Pottawatomie.
Henry Theador York,	Rossville, Shawnee.

THIRD YEAR.

Mamie Alexander,	Welda, Anderson.
Edgar McCall Amos,	Manhattan, Riley.
Henry Albert Avery,	Manhattan, Riley.
Etta Marie Barnard,	Springtown, <i>Arkansas</i> .
Mary Olive Barr,	Myers Valley, Pottawatomie.
Hazel Norris Berry,	Gardiner, <i>Maine</i> .
Charles Dallas Blachly,	Leonardville, Riley.
Georgia Evaline Blaney,	Manhattan, Riley.
Richard Franklin Bourne,	Delphos, Ottawa.
Floyd Adelbert Champlin,	Phillipsburg, Phillips.
Elijah Ellis Chase,	Merriam, Johnson.
Charles Howard Clark,	Kinsley, Edwards.
Maude Mildred Coe,	Yates Center, Woodson.
Murray Stanley Cole,	Denison, Jackson.
Robert Curtise Cole,	Denison, Jackson.
Mabel Aletta Corbett,	Manhattan, Riley.
Lotta Irene Crawford,	Manhattan, Riley.
Sarah Emily Davies,	Bala, Riley.
Robert William DeArmond,	Lincoln, Lincoln.
Robert Alexander Esdon,	Olsburg, Pottawatomie.
Le Roy Firebaugh,	Osawatomie, Miami.
Leslie Arthur Fitz,	Vinland, Douglas.
Glick Fockele,	Le Roy, Coffey.
Andrew Jewell Francis,	Lucas, Russell.
Fred Norton Gillis,	Keene, Wabaunsee.
Clark A. Gingery,	Summerfield, Marshall.
Esther E. Hanson,	Marquette, McPherson.
William Lee Harvey,	Arkalon, Seward.
Benjamin F. Haynes,	Marvin, Phillips.
William Rutherford Hildreth,	Altamont, Labette.
Christine Delphine Hofer,	Manhattan, Riley.
Sarah C. Hougham,	Manhattan, Riley.

Name.	Post-office and county (or state).
Edward Wilfred House,	Manhattan, Riley.
Jesse McCullah Jones,	Moran, Allen.
Letta Birdilla Keen,	Clay Center, Clay.
Edgar Willis Kimball,	Manhattan, Riley.
Arthur Henry Leidigh,	Hutchinson, Reno.
George Logan,	Manhattan, Riley.
John Austin Loomis,	Girard, Crawford.
Otto Meade McAninch,	Manhattan, (Pottawatomie).
Rose Margaret McCoy,	Manhattan, (Pottawatomie).
Edward Purcell McDowell,	Manhattan, Riley.
Carl W. McKeen,	Russell, Russell.
Amelia Augusta Maelzer,	Neuchatel, Nemaha.
Myrtle Mather,	Waverly, <i>Nebraska</i> .
Roger Bonner Mullen,	St. Joseph, <i>Missouri</i> .
Harold Theodore Nielsen,	Denmark, Lincoln.
Clara Pancake,	Scott City, Scott.
Grover Poole,	Briggs, Geary.
Abbie Elida Putnam,	Manhattan, Riley.
William Arthur Randle,	Bala, Riley.
George Dwight Reynolds,	Hollenberg, Washington.
Arthur J. Rhodes,	Manhattan, Riley.
Ernest Chester Ricord,	Esbon, Jewell.
Eva Talitha Rigg,	Marvin, Phillips.
Kate L. Robertson,	Manhattan, Riley.
Elsie Mary Robinson,	Manhattan, Riley.
Earl Nathaniel Rodell,	Marquette, McPherson.
Alice May Ross,	Manhattan, Riley.
John Francis Ross,	Webber, Jewell.
Pontus Henry Ross,	Webber, Jewell.
Fred Lewis Schneider,	Purcell, Doniphan.
Edmund Ray Secrest,	Randolph, Riley.
Glen Reid Shepherd,	Manhattan, Riley.
Henry August Sidorfsky,	Le Roy, Coffey.
Garfield William Skow,	Leonardville, Riley.
Charles Franklin Smith,	E. Chattanooga, <i>Tennessee</i> .
Frank H. P. Smith,	Manhattan, Riley.
Harley Lee Snodgrass,	Manhattan, Riley.
Milton David Snodgrass,	Manhattan, Riley.
Dean Snyder,	Oskaloosa, Jefferson.
Charles Orval Sparks,	Ludell, Rawlins.
Walter Hayward Spencer,	Yates Center, Woodson.
John Thomas Stafford,	Garnett, Anderson.
Raymond Kelley Taber,	Burlingame, Osage.
Frances Elleanor Thackrey,	Manhattan, Riley.
Harry Nelson Vinall,	Oakley, Logan.
Fred Walters,	Manhattan, Riley.
Albert A. Werner,	Alden, Rice.
Lilly Maud Zimmerman,	Moray, Doniphan.

SECOND YEAR.

Name.	Post-office and county (or state)..
Amy Alena Allen,	Manhattan, Riley.
Marian Allen,	Manhattan, Riley.
Ralph Alm,	Sharon Springs, Wallace.
Clinton Jesse Axtell,	Blue Rapids, Marshall.
Max E. Bacon,	Lakin, Kearny.
Harvey Wiltson Baker,	Marvin, Phillips.
William Burgess Banning,	Lyndon, Osage.
Clara Florence Barnhisel,	Newton, Harvey.
John Jeremiah Biddison,	Manhattan, Riley.
Wallace Newton Birch,	Manhattan, Riley.
Otis Neel Blair,	Quenemo, Osage.
Frank Andrus Blakslee,	Manhattan, Riley.
Warren Luther Bowlby,	Fairport, Russell.
Frank William Boyd,	Kensington, Smith.
William Armfield Boys,	Richter, Franklin.
Ruth Augusta Branstine,	Long Island, Phillips.
Charles Robert Brawner,	Axtell, Marshall.
Thomas Warner Buell,	Roanoke, <i>Texas</i> .
Eva Maggy Burtner,	Manhattan, Riley.
Edythe M. Cardwell,	Osage City, Osage.
August Belmont Carnahan,	Douglass, Butler.
Howard M. Chandler,	Kansas City, Wyandotte.
Edwin Weaver Coldren,	Oberlin, Decatur.
Clark Stewart Cole,	Manhattan, Riley.
William Dent Cool,	Denver, <i>Colorado</i> .
De Verne Corbin,	Oxford, Sumner.
James A. Correll,	Manhattan, Riley.
Victor L. Cory,	Dundee, Barton.
Amos Luther Cottrell,	Wabaunsee, Wabaunsee.
Jennie Pearl Cottrell,	Wabaunsee, Wabaunsee.
Jesse Addison Craik,	Oketo, Marshall.
Ella Criss,	Grigsby, Scott.
Wilma Greene Cross,	Manassas, <i>Virginia</i> .
Claude Carrol Cunningham,	Manhattan, Riley.
Bertha May Dana,	Manhattan, Riley.
Elliott Perie Daniels,	Birmingham, Jackson.
William Doz Davis,	Sharp's Creek, McPherson.
Charles Sumner Dearborn,	Silver Lake, Shawnee.
Edith DePriest,	Salina, Saline.
Lisla C. Dial,	Stockdale, Riley.
Thomas E. Dial,	Leavenworth, Leavenworth.
Lawrence A. Doane,	Manhattan, Riley.
May Doane,	Manhattan, Riley.
Roy Nathan Dorman,	Wabaunsee, Wabaunsee.
Otto Jonathan Pugh Doyle,	Manhattan, Riley.
Orrin Pomeroy Drake,	Beattie, Marshall.
Della Drollinger,	Garrison, Pottawatomie.
Anna Dunlap,	Walsburg, Riley.
Olive B. Dunlap,	Walsburg, Riley.

Name.	Post-office and county (or state).
Lewis Sidney Edwards,	Emporia, Lyon.
Leonora Darlin Eggen,	Florence, Marion.
Albert R. Engle,	Minneapolis, Ottawa.
William Leslie English,	Renfrow, <i>Oklahoma</i> .
Byron L. Evans,	Mankato, Jewell.
Corinne Failyer,	Manhattan, Riley.
Maude Irene Failyer,	Manhattan, Riley.
Ernest Clifford Farrar,	Beattie, Marshall.
Estella May Fearon,	Manhattan, Riley.
Ralph B. Felton,	McPherson, McPherson.
Ray Bonifield Felton,	McPherson, McPherson.
George Thomas Fielding,	Manhattan, Riley.
James William Fields,	McPherson, McPherson.
Beulah Fleming,	Smith Center, Smith.
Maud Bernice Fortune,	Manhattan, Riley.
Louis Cloyd Foster,	Newton, Harvey.
Arthur B. Gahan,	Manhattan, (Pottawatomie).
Edwin Chase Gardner,	Homewood, Franklin.
Clara S. Goodrich,	Mankato, Jewell.
Ellsworth Paul Goodyear,	Oatville, Sedgwick.
Walter Otis Gray,	Crestline, Cherokee.
Wellie Greene,	Lincoln, Lincoln.
Augusta Griffing,	Manhattan, Riley.
Francis Linus Grimm,	Solomon, Dickinson.
Charles Alfred Groves,	Edwardsville, Wyandotte.
Alanson L. Hallsted,	Havana, Montgomery.
Grace Martyn Haney,	Manhattan, Riley.
Harry Vaughn Harlan,	Walnut, Crawford.
Arthur Hurchel Helder,	Manhattan, Riley.
Orr Henderson,	Eureka, Greenwood.
Frank Ferris Hillyer,	Wilsey, Morris.
Chester Albert Hite,	Baker, Brown.
Edward Howard Hodgson,	Little River, Rice.
Pearl Holderman,	Chetopa, Labette.
Hartley Bowen Holroyd,	Manhattan, Riley.
John Samuel Houser,	Oxford, Sumner.
Maude Howard,	Manhattan, Riley.
Harry E. Hubbard,	Blue Rapids, Marshall.
Addie Hurlburt,	Sharon Springs, Wallace.
Mildred Irma Hurlburt,	Sharon Springs, Wallace.
Anna Johnson,	Solomon Rapids, Mitchell.
Axel H. Johnson,	Marquette, McPherson.
Carol Bertie Johnson,	Olsburg, Pottawatomie.
Henry L. Johnson,	Oskaloosa, Jefferson.
John Arthur Johnson,	Manhattan, Riley.
Retta Johnson,	Manhattan, Riley.
Daniel Lyons Kent,	Florence, Marion.
Fannie Kent,	Oswego, Labette.
Ralph Teeter Kersey,	Louisville, Pottawatomie.
Kenneth William Kimble,	Manhattan, Riley.
Samuel Robert Kimble,	Manhattan, Riley.

Name.	Post-office and county (or state).
Anthony Kolsky,	Kanona, Decatur.
Hernon Curtis Kyle,	Cawker City, Mitchell.
Harrie Stancliff Lee,	Manhattan, Riley.
Albert Addison Leonard,	Mahaska, Washington.
John E. P. Lowe,	Phillipsburg, Phillips.
Rachel V. McCoy,	Manhattan, (Pottawatomie).
Edwin William McCrone,	Haddam, Washington.
Sara Grace McCrone,	Haddam, Washington.
Kirk P. Mason,	Cawker City, Mitchell.
Howard David Matthews,	Carytown, <i>Missouri</i> .
Vernon Matthews,	Carytown, <i>Missouri</i> .
Clara Pearl May,	St. Petersburg, <i>Florida</i> .
Leanore Elizabeth Miller,	Manhattan, Riley.
Winfred L. Milner,	Belleville, Republic.
John Rutherford Minis,	Manhattan, Riley.
Samuel Erwin Morlan,	White Rock, Republic.
Benjamin Frank Mudge,	Manhattan, Riley.
Bessie A. Mudge,	Manhattan, Riley.
Lloyd D. Murray,	Council Grove, Morris.
Albert Marvin Nash,	Burlington, <i>Iowa</i> .
Frank Newell,	Zeandale, Riley.
Ivan L. Nixon,	Manhattan, Riley.
Margaret Alice Norton,	Manhattan, Riley.
Virginia Viola Norton,	Manhattan, Riley.
Russell Arthur Oakley,	Reedsville, Marshall.
Anna Louella O'Daniel,	Manhattan, Riley.
Celoa Alice Perry,	Manhattan, Riley.
Lenna Belle Perry,	Manhattan, Riley.
Burr Nuton Porter,	Oronoque, Norton.
Willis Howard Purdy,	Fairview, Brown.
Ralph Ramsbottom,	Munden, Republic.
Alexis Joseph Reed,	Smith Center, Smith.
Jennie Florence Ridenour,	Manhattan, Riley.
Fred Calvin Romig,	Curran, Harper.
Hermann Clare Russell,	Russell, Russell.
Alvirtis Santford Salkeld,	Manhattan, Riley.
William Samuel,	Stockdale, Riley.
Alfred Hayes Sanderson,	Reedsville, Marshall.
Mattie E. Sauble,	Cedar Point, Chase.
Nickolas Schmitz,	Little River, Rice.
Ida Amanda Schorer,	Vining, Clay.
Marie Edith Schorer,	Vining, Clay.
John Marcus Scott,	Westmoreland, Pottawatomie.
Robert Douglas Scott,	Blue Rapids, Marshall.
Emma Estella Smith,	Wabaunsee, Wabaunsee.
Horace Frederick Smith,	Wabaunsee, Wabaunsee.
Margie Smith,	Manhattan, Riley.
Sallie Maud Smith,	Manhattan, Riley.
Guy Emerson Souders,	Manhattan, Riley.
Crete Spencer,	Manhattan, Riley.
Harold Addison Spilman,	Manhattan, Riley.

Name.	Post-office and county (or state).
Lois Stump,	Manhattan, Riley.
Charles Bartholow Swift,	Williamsburg, Franklin.
Harry Raymond Thatcher,	Great Bend, Barton.
Henry Thomas,	Wichita, Sedgwick.
Helen B. Thompson,	Wamego, (Wabaunsee).
John Augustus Thompson,	Edwardsville, Wyandotte.
Lewis W. Thompson,	Osborne, Osborne.
Ray Harmon Thompson,	Osborne, Osborne.
Sarah Pauline Thompson,	Osborne, Osborne.
John Tompkins,	Waverly, Coffey.
William Turnbull,	Summerfield, Marshall.
Dovie May Ulrich,	Manhattan, Riley.
Charles William Utterson,	Oswego, Labette.
Gertrude M. Vance,	Manhattan, Riley.
Harriet Emily VanEveren,	Manhattan, Riley.
Eleanor Belle VanOrsdel,	Riley, Riley.
Alberta Suenav Voiles,	Manhattan, Riley.
Orin Russell Wakefield,	Wilsey, Morris.
Laura Bell Ware,	Manhattan, Riley.
Harry Wilson Wells,	Belleville, Republic.
Ray Wells,	Munden, Republic.
Margaret Welter,	Myers Valley, Pottawatomie.
Orville Blaine Whipple,	Olivet, Osage.
David Dwight White,	Newton, Harvey.
Leon Vincent White,	Manhattan, Riley.
George Everett Whitney,	Manhattan, Riley.
Ray R. Wick,	Buckeye, Dickinson.
George Edwin Williams,	Hoganville, Graham.
Harold Bert Wolfe,	Kensington, Smith.
Thomas J. Woodworth,	Walnut, Neosho.
Alice M. Worley,	Natoma, Osborne.
Walter Scott Wright,	Marvin, Phillips.

FIRST YEAR.

Onatus P. Allen,	Glen Elder, Mitchell.
Bertha Edith Allingham,	Manhattan, Riley.
Harold H. Amos,	Manhattan, Riley.
Cecil Girard Anderson,	Manhattan, Riley.
James George Arbuthnot,	Cuba, Republic.
James McPhearson Archer,	Waldo, Russell.
Howard Le Roy Arnett,	Wichita, Sedgwick.
Albert Clay Aumann,	Geuda Springs, Cowley.
Earl Axtell,	Fort Worth, Texas.
Charles M. Baird,	Arkansas City, Cowley.
Charles Olin Baird,	Marquette, McPherson.
Cora May Baird,	Marquette, McPherson.
Harry C. Bardshar,	Mount Hope, Sedgwick.
Walter Ray Barr,	Manhattan, Riley.
Earle Maynard Baxter,	Manhattan, Riley.
Mabel Baxter,	Manhattan, Riley.
William John Beardwell,	Wa Keeney, Graham.

Name.	Post-office and county (or state).
Thomas Edward Beckett,	Olathe, Johnson.
Atwood N. H. Beeman,	St. Louis, <i>Missouri</i> .
Evelyne Myrtle Berkley,	Manhattan, Riley.
Arthur N. Berquist,	Lindsborg, McPherson.
Grace M. Bicknell,	Hoisington, Barton.
McDonald Biddison,	Manhattan, Riley.
Frank Milton Billick,	Newton, Harvey.
Ida E. Birch,	Manhattan, Riley.
Raymond Russell Birch,	Manhattan, Riley.
Charles P. Blachly,	Manhattan, Riley.
Harrie Bobenhouse,	Narka, Republic.
Charles Walter Scott Silvester Bolton,	Craig, Johnson.
Edwin T. Bower,	Manhattan, Riley.
Walter Brant,	Wichita, Sedgwick.
George K. Brenner,	Porterville, Bourbon.
Viva Brenner,	Porterville, Bourbon.
Benjamin Franklin Britton,	Fort Worth, <i>Texas</i> .
G. Homer Brown,	Arkansas City, Cowley.
P. Jean Brown,	Guilford, Wilson.
Thaddie C. Brown,	Guilford, Wilson.
Lewis Burns,	Hoyt, Jackson.
Bernice Burton,	Irving, Marshall.
Anna Grace Campbell,	Council Grove, Morris.
Perry Campbell,	Macksville, Stafford.
Walter W. Carlson,	Mingo, Thomas.
Samuel Mordecai Carnahan,	Stockdale, Riley.
James Edward Carter,	Oskaloosa, Jefferson.
Albert F. Cassell,	Beverly, Lincoln.
John G. Chapin,	Oketo, Marshall.
Clarence E. Chase,	Junction City, Geary.
Levi Charles Chase,	Hoyt, Jackson.
Joseph Griffith Chitty,	Frankfort, Marshall.
Florence Christina Christensen,	Mariadahl, Riley.
Norman Clifton,	Kelly, Nemaha.
Delmer Coffman,	Manhattan, Riley.
Anna B. Cole,	Manhattan, Riley.
Earle Albert Cole,	Cuba, Republic.
Andrew D. Colliver,	Galva, McPherson.
Gertrude Matilda Conner,	Mitchell, Rice.
Edna L. Converse,	Rhinehart, Dickinson.
James Martin Cook,	Effingham, Atchison.
Perry Alfred Cooley,	Denison, Jackson.
Forrest Leslie Courter,	Downs, Osborne.
Bertha Cowles,	Sibley, Douglas.
Ora Dow Crofut,	Westmoreland, Pottawatomie.
Walter Leroy Cropper,	Oakvale, Smith.
Newton Crow,	West Point, <i>Mississippi</i> .
Charles Curtis Crowley,	Council Grove, Morris.
Jules Cool Cunningham,	Glasco, Cloud.
Jesse Clyde Currie,	Olsburg, Pottawatomie.
Charles E. Dana,	Manhattan, Riley.

Name.	Post-office and county (or state).
William E. Danielson,	Clay Center, Clay.
Rose Daugherty,	Strong City, Chase.
Wade Herbert Davidson,	Agricola, Coffey.
Ida Mayme Davis,	Manhattan, Riley.
Mary E. Davis,	Manhattan, Riley.
Minnie Davisson,	Summerfield, Marshall.
M. Vernie Dawson,	Newman, <i>Illinois</i> .
Loea Bessie DeArmond,	Manhattan, Riley.
Minnie Estella Deibler,	Manhattan, Riley.
Florene B. Deputy,	Manhattan, Riley.
Will C. De Selm,	Oakvale, Smith.
Earle Scott Dewey,	Manhattan, Riley.
Frank C. Dilts,	Hesston, Harvey.
Alice Ada Dresser,	Manhattan, Riley.
Alma Duckwall,	Manhattan, Riley.
Carl O. Duehn,	Clements, Chase.
George W. Edgar,	Lincoln, <i>Illinois</i> .
Glen Edgar Edgerton,	Manhattan, Riley.
Carl C. Elling,	North Cedar, Jefferson.
James H. Elliott,	Richfield, Norton.
Joseph Conroe Engle,	Minneapolis, Ottawa.
Benjamin Robert Evans,	Morrison, <i>Colorado</i> .
Minter Farrar,	Axtell, Marshall.
Edith Louisa Felton,	McPherson, McPherson.
Ida May Ferguson,	Frankfort, Marshall.
Lena Finley,	Manhattan, Riley.
Jessie Lois Fitz,	Vinland, Douglas.
Elmore Sampson Fleming,	Block, Miami.
Fenton Burn Fleming,	Athol, Smith.
Flora Fern Fleming,	Smith Center, Smith.
Hattie L. Forsyth,	Dwight, Morris.
Pearl Frost,	Esbon, Jewell.
Robert Anson Fulton,	Glen Elder, Mitchell.
Christian A. Gabelman,	Fairport, Ellis.
Alfred Gallup,	Blue Rapids, Marshall.
Philip Dudley Gardiner,	Kane, <i>Illinois</i> .
Ro Zella Gardner,	Manhattan, Riley.
George W. Gasser,	Neosho, <i>Missouri</i> .
Mary Mabel Gibbons,	Capioma, Nemaha.
Tressie E. Gibbs,	Manhattan, Riley.
Ida May Gideon,	Adrian, Jackson.
Eugene Lyman Gilbert,	Manhattan, Riley.
David E. Gish,	Acme, Dickinson.
Oliver Holmes Gish,	Acme, Dickinson.
Robert Dudley Glidden,	Homewood, Franklin.
Harry V. Graham,	Beverly, Lincoln.
Frank Richard Grant,	Ellinwood, Barton.
Helen Janette Grant,	Ellinwood, Barton.
John Otto Greenawalt,	Princeton, Franklin.
Frederic James Griffing,	Manhattan, Riley.
John Bernice Griffing,	Manhattan, Riley.

Name.	Post-office and county (or state).
Herbert Revere Groome,	Manhattan, Riley.
Mabel Estelle Groome,	Williamsburg, Franklin.
Emil Theodore Haggman,	Kackley, Republic.
Edna Haines,	Manhattan, Riley.
Mabel Louise Hamilton,	Manhattan, Riley.
Avery Vernon Hancock,	Manhattan, Riley.
Robert Howe Haney,	Manhattan, Riley.
Otto Albert Hanson,	Marquette, McPherson.
Mason Loring Haskell,	Gaylord, Smith.
Mamie Magdelene Hassebroek,	Manhattan, Riley.
Allie May Heacock,	Manhattan, Riley.
William A. Hendershot,	Bolivar, <i>Missouri</i> .
Henry Hess,	Hesston, Harvey.
George Edward Hill,	Walnut, (Neosho).
Orley Justin Hillyer,	Manhattan, Riley.
George Elmer Hiner,	McFarland, Wabaunsee.
Jennie Du Boise Hitchner,	Centralia, Nemaha.
Lewis D. Hitchner,	Centralia, Nemaha.
Inez Leoti Hjort,	Manhattan, Riley.
Frederick Earl Hodgson,	Little River, Rice.
Anna Hostrup,	Manhattan, Riley.
Earnest Alfred Houghton,	Manhattan, Riley.
Mabel Howell,	Manhattan, Riley.
Minnie May Hoy,	Webber, Jewell.
Robert Hudgin,	Hinton, <i>West Virginia</i> .
Bessie Isabel Hudson,	Manhattan, Riley.
Roy Hulse,	Keats, Riley.
Vida Grace Hurlburt,	Sharon Springs, Wallace.
Kate M. Hutchinson,	Bellaire, Smith.
Bruce Royalford Jackson,	Garfield, Pawnee.
Oscar Jaedicke,	Hanover, Washington.
Evan James,	Bala, Riley.
Adolph Sigfrid Johnson,	Kackley, Republic.
Charles Willard Johnson,	Solomon Rapids, Mitchell.
James Johnson,	Manhattan, Riley.
Robert Johnson,	Newman, Jefferson.
Will C. Johnston,	Manhattan, Riley.
Samuel Edgar Joy,	Osborne, Osborne.
Walter E. Keef,	Kensington, Smith.
William Louis Kelly,	Mayetta, Jackson.
Evan Kernohan,	Beverly, Lincoln.
Pliny Whittier Keys,	Gypsum City, Saline.
Park Barnes Kimball,	Topeka, Shawnee.
Charles Franklin Kinman,	Formosa, Jewell.
Luie Edgar Klein,	Fostoria, Pottawatomie.
William Gilbert Kling,	Ottawa, Franklin.
Bertha Krotzer,	Manhattan, Riley.
Charles Kruger,	Seneca, Nemaha.
Harry S. Lamborn,	Burlington, Coffey.
William C. Lane,	Burlington, Coffey.
Clair Legere,	Hill City, Graham.

Name.	Post-office and county (or state).
Albert L. Leonard,	Ellis, Ellis.
Douglas Lester,	Comiskey, Morris.
Halvor Lindland,	Toronto, <i>South Dakota</i> .
William Ljungdahl,	Briggs, Geary.
Theodosia Lofinck,	Manhattan, Riley.
Daniel Andrew Logan,	Manhattan, Riley.
Ed. Logan,	Manhattan, Riley.
Roy Earl Zane Long,	Brooks, Wilson.
George Lovett,	Neodesha, Wilson.
William L. Lyman,	Manhattan, Riley.
Eugene McCorkle,	Great Bend, Barton.
Alvena McCoy,	Meriden, Jefferson.
Margaret McCoy,	Meriden, Jefferson.
Minnie Etta McCoy,	Meriden, Jefferson.
Nellie Reeder McCoy,	Meriden, Jefferson.
Frances McCreary,	Manhattan, Riley.
Ida McCurdy,	Vernon, <i>Texas</i> .
Georgiana McCutchan,	Wabaunsee, Wabaunsee.
Vera Alta McDonald,	Manhattan, Riley.
Archie McElroy,	Fort Worth, <i>Texas</i> .
Roy Monroe McKee,	Offerle, Edwards.
Charles McRoberts,	Mankato, Jewell.
Lloyd Marriott,	Denison, Jackson.
Cora Marguerite Martin,	Junction City, (Riley).
Freide E. Marty,	Merriam, Johnson.
Chester Arthur Maus,	Topeka, Shawnee.
James G. May,	Manhattan, Riley.
Ruby Estella May,	Manhattan, Riley.
Albert Meyer,	Junction City, Geary.
Earle B. Millard,	Manhattan, Riley.
Clarence Metcalf Miller,	Manhattan, Riley.
George C. Miller,	Valencia, Shawnee.
Katherine Jessie Peeling Miller,	Centralia, Nemaha.
Percy E. Mills,	Topeka, Shawnee.
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Julia Anna Monroe,	Whiting, Jackson.
Lindsey Noble Moore,	Lenora, Norton.
Marshall E. Morlan,	Welcome, Geary.
Thomas Munyon,	Conway, McPherson.
Verda Ellen Murphy,	Manhattan, Riley.
William Vern Neighbors,	McPherson, McPherson.
Arthur Nichols,	Buffalo, Woodson.
Jesse David Nitcher,	Ottawa, Franklin.
Fred O'Daniel,	Westmoreland, Pottawatomie.
Lulu Gertrude O'Daniel,	Manhattan, Riley.
Louie Lee Paine,	Manhattan, Riley.
Rennick Rubenell Paine,	Manhattan, Riley.
Louis Reynolds Parkerson,	Manhattan, Riley.
Ona A. Parsons,	Osawkie, Jefferson.
Freda E. Patterson,	Blue Rapids, Marshall.
Floyd Calvin Payne,	Munden, Republic.

Name.	Post-office and county (or state).
Charles Edwin Peck,	Little River, Rice.
Florence Phillips,	Garrison, Pottawatomie.
Daniel Webster Pilkington,	Waverly, Coffey.
Tom Lawrence Pittman,	Hammond, Bourbon.
John R. Powers,	Los Angeles, <i>California</i> .
Eunice Putnam,	Manhattan, Riley.
Charles A. Pyles,	Morrill, Brown.
Charles Clinton Randle,	Bala, Riley.
Jack K. Ransom,	Mankato, Jewell.
Harry Eugene Reed,	Smith Center, Smith.
Hattie Jane Reed,	Smith Center, Smith.
Abraham F. Regier,	Moundridge, (Harvey).
Clara Grace Rehfeldt,	Manhattan, Riley.
Emmit D. Richardson,	Glen Elder, Mitchell.
Jesse Clyde Rickman,	Manhattan, Riley.
Nellie Eva Rickman,	Manhattan, Riley.
Thurman Guy Rickman,	Manhattan, Riley.
Arthur L. Risley,	Nickerson, Reno.
Alfred Montgomery Ritner,	Manhattan, Riley.
Jennie Inez Ritner,	Manhattan, Riley.
Margaret Isabel Ritner,	Manhattan, Riley.
Mona Clare Robbins,	Manhattan, Riley.
Fred B. Roberts,	Morrill, Brown.
Thomas Jefferson Robinson,	Manhattan, Riley.
Jesse Loyde Rogers,	Louisburg, Miami.
Rollo Raymond Rogers,	Glasco, Cloud.
Hannah Rollins,	Agra, Phillips.
Sarah Rollins,	Agra, Phillips.
Arthur B. Rose,	Hutchinson, Reno.
Fred F. Rose,	Hutchinson, Reno.
Harry Alphonso Rowland,*	Broughton, Clay.
Zeta Salkeld,	Manhattan, Riley.
Lawrence V. Sanford,	Oneida, Nemaha.
Ranier Henry Sanneman,	Clay Center, Clay.
James G. Savage,	Bluff Springs, <i>Illinois</i> .
Henry P. Schowalter,	Halstead, Harvey.
Mabel Clare Schultz,	Manhattan, Riley.
Charles Warren Shamburg,	Waldo, Russell.
Marie Vernon Shartel,	Wauneta, Chautauqua.
Edward Alfred Shirtcliff,	Otego, Jewell.
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Cora May Shull,	Manhattan, Riley.
Charles Andrew Simpson,	Manchester, Dickinson.
John W. Singleton,	Winchester, Jefferson.
Lena M. Sittel,	McAlester, <i>Indian Territory</i> .
John T. Skinner,	Neodesha, Wilson.
Esther Winona Sloan,	Manhattan, Riley.
Homer A. Smith,	Logan, Phillips.
Stanley Van Smith,	Osawkie, Jefferson.
Walter Emery Smith,	Hall's Summit, Coffey.

*Deceased.

Name.	Post-office and county (or state).
Frank Spencer,	Gypsum, Saline.
Merlin Selden Spencer,	Chetopa, Labette.
George A. Spohr,	Manhattan, Riley.
Julia C. Spohr,	Manhattan, Riley.
Henry Adam Spuhler,	Okarche, <i>Oklahoma</i> .
William Wesley Stanfield,	Chanute, Neosho.
Arthur S. Stauffer,	Newton, Harvey.
Peter Walter Steele,	Preston, Pratt.
Harrison Elias Stephens,	North Topeka, Shawnee.
Blanche Stevens,	Humboldt, Allen.
Harry L. Stevens,	Green, Clay.
Mabel Stevens,	Humboldt, Allen.
Halcey Benjamin Stickney,	Centralia, Nemaha.
George Ross Oswald Stratton,	Minneapolis, Ottawa.
Mary Catherine Strite,	Ogden, Riley.
Luther Emanuel Swanson,	Madison, Greenwood.
Jessie A. Sweet,	Stockdale, Riley.
K. Elizabeth Sweet,	Burlington, Coffey.
Dock Eugene Taber,	Burlingame, Osage.
Joseph Earl Tanner,	Laclede, Pottawatomie.
Howard Taylor,	Rhinehart, Dickinson.
William G. Tellin,	Neal, Greenwood.
William A. Thomas,	Barclay, Osage.
Carl Thompson,	Garrison, Pottawatomie.
Charles L. Thompson,	Leon, Butler.
Rose S. Thompson,	Garrison, Pottawatomie.
Theodore Tischhauser,	Donegal, Dickinson.
Norman Lee Town,	Valencia, Shawnee.
Hezekiah Tracy,	New Lancaster, Miami.
Marshall Trembley,	Buffalo, Woodson.
James Monroe Trobert,	Kelly, Nemaha.
Frieda Trunk,	Lyons, Rice.
George Turnbull,	Summerfield, Marshall.
Alonzo F. Turner,	Oakley, Logan.
Charles F. Turner,	Los Angeles, <i>California</i> .
Marcia Elizabeth Turner,	Rock Creek, Jefferson.
William A. Turner,	Rock Creek, Jefferson.
Grace E. Umberger,	Hymer, Chase.
Harry Umberger,	Hymer, Chase.
Charles VanAmburg,	Munden, Republic.
Leonard VanDeusen,	Elyria, McPherson.
John Vesecky,	Ryan, Rush.
Margaret Walcher,	Louisville, Pottawatomie.
Frank Hannibal Walters,	Manhattan, Riley.
Ina Dale Ware,	Manhattan, Riley.
Peaché Washington,	Manhattan, Riley.
Frank Cooper Webb,	Clearwater, Sedgwick.
Edward Welter,	Myers Valley, Pottawatomie.
Mary C. West,	Spring Hill, Johnson.
Ernest Dwight Wheat,	Broderick, Pottawatomie.
Clarence Earl Whipple,	Olivet, Osage.

Name.	Post-office and county (or state).
Wayne White,	Burlington, Coffey.
Henry George Wierenga,	Cawker City, (Jewell).
Amelia Jennie Wiest,	Manhattan, Riley.
Florence Elaine Wilber,	Belleville, Republic.
Jenevi M. Wilkinson,	Topeka, Shawnee.
Rose Wilkinson,	Newman, Jefferson.
William J. Wilkinson,	Newman, Jefferson.
Blanche Williams,	Manhattan, Riley.
Fannie R. Williams,	Manhattan, Riley.
George Leroy Williston,	Manhattan, Riley.
Della Wilson,	Liberal, Seward.
Frederick W. Wilson,	Hill City, Graham.
George Heber Wilson,	Kellogg, Cowley.
John T. Wilson,	Fairview, Brown.
Martha Ellen Wilson,	Kellogg, Cowley.
Maud L. Wilson,	Osawkie, Jefferson.
Scott Wilson,	Osawkie, Jefferson.
Albert Lemont Wiltse,	Downs, Osborne.
Jesse E. Winsler,	Abilene, Dickinson.
Caroline Marie Winter,	Manhattan, Riley.
Charles H. Withington,	Allen, Lyon.
Katherine J. Witt,	Hartshorne, <i>Ind. Ter.</i>
George Wolf,	Garden City, Finney.
Earnest A. Wright,	Athol, Smith.
Emily Elizabeth Yarroll,	Leavenworth, Leavenworth.
Ed. Harvey Zirkle,	Richland, Shawnee.

PREPARATORY.

Roy Ablard,	Delphos, Ottawa.
Lee Adamson,	Kelly, Nemaha.
Pearle Akin,	Manhattan, Riley.
Florence Olive Anderson,	Randolph, Riley.
George Leslie Ashton,	Keats, Riley.
Dottie Ayres,	Garnett, Anderson.
Fred Bainer,	Pleasant Hill, Franklin.
Mace Leonard Baird,	Kensington, Smith.
Russell B. Baker,	Yates Center, Woodson.
Madeline Ball,	Hays City, Ellis.
Frank Everett Balmer,	Woodston, Rooks.
Norman F. Banning,	Moline, Elk.
Willie P. Barber,	Windom, McPherson.
Clarence A. Barclay,	Windom, McPherson.
Carol J. Barlow,	Blue Rapids, Marshall.
Walter Myron Barnes,	Topeka, Shawnee.
William Louis Bartholomees,	Kansas City, <i>Missouri</i> .
Zachry Bartlett Baughn,	Netawaka, Jackson.
Cora Mae Beachum,	Manhattan, Riley.
Hattie Beachum,	Manhattan, Riley.
Viola Marian Bear,	Detroit, Dickinson.
George L. Beardsley,	Point View, Pawnee.
Oliver G. Beckes,	Carbondale, Osage.

Name.	Post-office and county (or state).
Kate Bell,	Manhattan, Riley.
Millard Bennett,	Delphos, Ottawa.
Lois Eva Bicknell,	Hoisington, Barton.
Worthy Val Jean Biddison,	Manhattan, Riley.
George A. Bigler,	Girard, Crawford.
Chester Blaylock,	St. Clere, Pottawatomie.
William Branstine,	Long Island, Phillips.
Jesse E. Breckbill,	Moonlight, Dickinson.
Flora Edna Brenner,	Porterville, Bourbon.
Bertha Brown,	Fortesque, <i>Missouri</i> .
Jennie Reba Brown,	Whiting, Jackson.
Phocion Bryen,	Haddam, Washington.
Etta Buell,	Pavilion, Wabaunsee.
Herbert Buell,	Pavilion, Wabaunsee.
Albert W. Buhrer,	Chapman, Dickinson.
William Burtner,	Manhattan, Riley.
George Capsey,	Soldier, Jackson.
Elmer Carr,	Athol, Smith.
Robert Archer Cassell,	Manhattan, Riley.
Elmer L. Christensen,	Marquette, McPherson.
Norman H. Clark,	Welcome, Geary.
Earle Clemmons,	Waldo, (Osborne).
Edith Clemmons,	Waldo, (Osborne).
Pearl Winfield Cloud,	Hamlin, Brown.
Olin J. Coleman,	Rose Hill, Butler.
Ralph Cooley,	Manhattan, Riley.
Don Carl Corbin,	Owens, <i>Oklahoma</i> .
Richard J. Courter,	Downs, Osborne.
Leon D. Cover,	Arkansas City, Cowley.
J. Marion Cox,	Junction City, Geary.
(Mrs.) Elizabeth Crissman,	Manhattan, Riley.
Harry Crump,	Manhattan, Riley.
Rosa J. Cunningham,	Manhattan, (Pottawatomie).
Sarah C. Cunningham,	Manhattan, (Pottawatomie).
Abrem Bentzley Currier,	Garnett, Anderson.
James Hyatt Davidson,	Agricola, Coffey.
Charles Fred Davis,	Stafford, Stafford.
Mark Hanna Davis,	Central City, Anderson.
Charles Henry Dean,	Woodward, <i>Oklahoma</i> .
Bert Diller,	Clay Center, Clay.
Julius Dinse,	Elmo, Dickinson.
Nellie June Doane,	Manhattan, Riley.
Anna Dorothea Dodge,	Stockdale, Riley.
Warren K. Dodge,	Manhattan, Riley.
Warren Joy Dodson,	Burns, Marion.
Charles Morton Dole,	Dolespark, McPherson.
Susie Ellen Doverspike,	Welcome, Geary.
Henry Millagum Downie,	Denison, Jackson.
Mary Elmyra Dye,	Whiting, Jackson.
Gustave Eastman,	Ogden, Riley.
Charles Eklund,	Windom, McPherson.

Name.	Post-office and county (or state).
Emil Erickson,	Marquette, McPherson.
Adoniram Judson Ervin,	McPherson, McPherson.
James Earnest Estes,	Briggs, Geary.
Bernell Eychaner,	Oketo, Marshall.
Ben T. Farman,	Neosho Falls, Woodson.
Florence May Felton,	McPherson, McPherson.
George Louis Fenwyck,	Irving, Marshall.
Bertram J. Finch,	Waverly, Coffey.
Edward A. Fitzgerald,	Valencia, Shawnee.
Marion Hayden Fleming,	Smith Center, Smith.
Albert E. Foster,	Powhattan, Brown.
Delbert Leroy Frager,	Corning, Nemaha.
Fred Lorenze Franz,	Adrian, Jackson.
James Freeborn,	Ames, Cloud.
Louis Froescher,	Myers Valley, Pottawatomie.
Newton Staley Gall,	Reserve, Brown.
Anna Marie Gardiner,	Kane, <i>Illinois</i> .
Fred L. Gilbert,	Edgerton, Johnson.
Roy Gillaspie,	Carl, Jackson.
Roy Gilmore,	Oneida, Nemaha.
Joseph Arthur Gleason,	Munden, Republic.
Phillip Keith Goodyear,	Oatville, Sedgwick.
J. Charles Green,	Windom, McPherson.
Vivian Roy Griffith,	Bates, <i>Missouri</i> .
Carl Ernest Gustafson,	McPherson, McPherson.
William Alfred Gustafson,	McPherson, McPherson.
Aaron Guth,	Pekin, Reno.
Clinton Speed Guyer,	Los Angeles, <i>California</i> .
Charles Frank Haas,	Neodesha, Wilson.
Joseph F. Habiger,	Bushton, Rice.
Omer L. Hainey,	Green, Clay.
Jessie Hale,	Eureka, Greenwood.
Earl Halferty,	Conway, McPherson.
Walter Clare Halferty,	Conway, McPherson.
John K. Hall,	Powhattan, Brown.
Lillie Elma Hall,	Blaine, Pottawatomie.
Nellie G. Hall,	Millard, Barton.
Arthur Daniel Hallmark,	White City, Morris.
Jesse Lincoln Haney,	Courtland, Republic.
Charles H. Hanson,	Greenleaf, Washington.
Ewald Theodore Hanson,	Olsburg, Pottawatomie.
George A. Hanson,	Greenleaf, Washington.
Victor Emanuel Hanson,	Olsburg, Pottawatomie.
Joseph Hartshorne,	La Grange, Marshall.
Earl Vane Hawthorne,	Conway, McPherson.
Emil Theodor Hedberg,	Marquette, McPherson.
Melvin O. Hensley,	Logan, Phillips.
Anna Hess,	Hesston, Harvey.
John R. Hirn,	Arkalon, Seward.
John Hislop,	Talmage, Dickinson.
Mrs. Lenna A. Hodgson,	Lyons, Rice.

Name.	Post-office and county (or state).
Samuel W. Hodgson,	Little River, Rice.
William M. Hofman,	Manhattan, (Pottawatomie).
Otto William Holt,	White City, Morris.
Joe Hovel,	Cuba, Republic.
W. Herbert Howard,	Abilene, Dickinson.
Orral A. Hull,	McPherson, McPherson.
Signa M. Ipsen,	Manhattan, Riley.
J. Herbert Jack,	Paradise, Russell.
Alfred J. James,	Wetmore, Nemaha.
Alfred H. Jefferis,	Newton, Harvey.
William Morris Jenkins,	Newman, Jefferson.
Theodore William Jensen,	Mingo, Thomas.
Josiah Anderson Jeter,	St. Clere, Pottawatomie.
Ruey Gladys Jewell,	Manhattan, Riley.
Alta L. Jewitt,	Yates Center, Woodson.
Charles Fredrick Johnson,	Mayday, Riley.
Elwin Johnson,	Piedmont, Greenwood.
Gust Johnson,	Delmore, McPherson.
Lillie Almira Johnson,	Codell, Rooks.
Martin Albert Johnson,	Marquette, McPherson.
Charles Judd,	Irving, Marshall.
Harry W. Judd,	Manchester, Dickinson.
Sam E. Judd,	Manchester, Dickinson.
Edward R. Kelley,	Winfield, Cowley.
William Francis Kelley,	Winfield, Cowley.
George Henry Kellogg,	Manhattan, Riley.
Orrin Kennedy,	Lawrence, Douglas.
Claude H. King,	Florence, Marion.
Roy W. Kirton,	Kremlin, <i>Oklahoma</i> .
Joseph P. Klein,	Fostoria, Pottawatomie.
George Kubin,	McPherson, McPherson.
Leon Lalouette,	Florence, Marion.
Elijah William Elmer Lance,	Buffalo, Wilson.
Emma Rosetta Lane,	Tescott, Ottawa.
David S. Lansdown,	Elk Falls, Elk.
Otis Lantis,	Newton, Harvey.
Tip H. Lantis,	Newton, Harvey.
Elbert M. Lantz,	Waldo, Russell.
Albert Laravana Larson,	Marquette, McPherson.
May M. Leonard,	Alma, Wabaunsee.
Ralph Lilley,	Star, Greenwood.
Luther Lininger,	Hope, Dickinson.
James Arthur McBride,	Pleasant Hill, <i>Missouri</i> .
Walter McCafferty,	Overbrook, Osage.
Rhoda C. McCartney,	Garden City, Finney.
Mark E. McColm,	Emporia, Lyon.
Marmaduke McComas,	Westmoreland, Pottawatomie.
Edward McCoy,	Sabetha, Nemaha.
Ida Blanche McCrone,	Haddam, Washington.
Robert Dent McDowell,	Milford, Geary.
Eva D. McGuire,	Paradise, Osborne.

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Alvin B. McKibbin,	Goffs, Nemaha.
Clarence E. McKibbin,	Goffs, Nemaha.
George Earl McKibbin,	Goffs, Nemaha.
Joseph William McLeavy,	Dwight, Morris.
Jay D. McNay,	Clifton, Clay.
Obert McProud,	Louisville, Pottawatomie.
Osborne K. McProud,	Manhattan, Riley.
Erastus Irwin Mallory,	Hoisington, Barton.
Laura Markham,	Throop, Washington.
Marguerite Martin,	Cadiz, <i>Ohio</i> .
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Leonard Brooks Mayer,	Newton, Harvey.
Frank Miller,	Milford, Geary.
Harry Miller,	Larkin, Jackson.
Ira James Monroe,	Whiting, Jackson.
Roy N. Monroe,	Whiting, Jackson.
Edith Morey,	Narka, Republic.
Stella Morey,	Fairview, Brown.
T. E. Morlan,	Weston, Geary.
James Morrison,	Ford, Ford.
John Clemet Morrison,	Great Bend, Barton.
Lewis Claide Morton,	Osage City, Osage.
James Ira Mulock,	Mulock, <i>Texas</i> .
William G. Munks,	Mayview, Jewell.
Kate Murray,	Ogden, Riley.
Myrtle Nicholson,	Manhattan, Riley.
Rachel Gertrude Nicholson,	Manhattan, Riley.
Alba Alma Nicolay,	Burlingame, Osage.
Emiel Nielsen,	Denmark, Lincoln.
John Noel,	Olathe, Johnson.
Olon William Noel,	Olathe, Johnson.
Jens Nygard,	Denmark, Lincoln.
Charles W. Orr,	Hammond, Bourbon.
William G. Otis,	Topeka, Shawnee.
Clarence Torrie Owsley,	Glenwood, Leavenworth.
A. F. Packard,	Chapman, Dickinson.
Carl Peter August Palmer,	Manhattan, Riley.
Ernest Samuel Pangburn,	Waldo, Russell.
Minnie Partridge,	Topeka, Shawnee.
Claud Henry Paulsen,	Havensville, Pottawatomie.
Roy Lynn Payton,	Hoisington, Barton.
Grace D. Pearson,	Humboldt, Allen.
Stella Jane Pearson,	Humboldt, Allen.
Walter H. Percival,	Beverly, Lincoln.
Roy W. Pitsenberger,	Council Grove, Morris.
William Leslie Porter,	Manhattan, Riley.
Charles Arthur Pray,	Dayton, Dickinson.
Essie Ramsay,	Mont Ida, Anderson.
Elmer E. Randel,	Corning, Nemaha.
Elmer Rask,	McPherson, McPherson.
Ola Rathbone,	Manhattan, Riley.

Name.	Post-office and county (or state).
Tiffin Arthur Rector,	Wellington, Sumner.
Alvin Josiah Reed,	St. Clere, Pottawatomie.
Harry Calvin Reeder,	Logan, Phillips.
Gerald A. Reeher,	Ottawa, Franklin.
George Stephen Regenold,	Petertown, Osage.
William Reinecke,	Heizer, Barton.
W. Warren Reutter,	Circleville, Jackson.
Harvey L. Riley,	Stafford, Stafford.
Clarence Edrids Risley,	Nickerson, Reno.
Charles P. Ritchie,	Manhattan, Riley.
Frank B. Robbins,	Esbon, Jewell.
William Rosenbalm,	Powhattan, Brown.
Charles Ayres Ross,	Industry, Dickinson.
Herbert Royer,	Valley Falls, Jefferson.
George Rumold,	Dillon, Dickinson.
George W. Rundell,	Stafford, Stafford.
George Haswell Ryan,	Galena, Cherokee.
Daisy Sawyer,	Fairview, Brown.
Granville Bond Scanland,	Randall, Jewell.
Emma Scheideman,	La Crosse, Rush.
John E. Scheideman,	La Crosse, Rush.
Fred A. Schuetz,	Coffeyville, Montgomery.
Philip Richard Schul,	Moline, Elk.
Flossie Maud Scidmore,	Tescott, Ottawa.
Elden Scott,	Ionia, Jewell.
Nellie Severson,	Randall, Jewell.
Ernest Warren Shaffer,	Dover, (Wabaunsee).
Leigh Wesley Shaffer,	Fulton, Bourbon.
Leroy Elsworth Sharer,	Monument, (Thomas).
Luther Henry Sharer,	Monument, Logan.
Mark Shartel,	Wauneta, Chautauqua.
George M. H. Shea,	Louisville, Pottawatomie.
Richard B. Shea,	Blaine, Pottawatomie.
Elsie Maud Sheard,	Esbon, Jewell.
Theodore B. Shinn,	Millerton, Sumner.
Garfield Shirley,	Newman, Jefferson.
Lou Belle Shirley,	Newman, Jefferson.
Bert Short,	Clifton, Washington.
Martin Roy Shuler,	Clifton, Washington.
Sarah Ann Simms,	Manhattan, Riley.
Ward Simon,	Corning, Nemaha.
Peter F. Simpson,	Barnard, Lincoln.
Grace Dollie Smith,	Manhattan, Riley.
Jay Latimer Smith,	Osawkie, Jefferson.
Frank F. Springer,	Smith Center, Smith.
Ervin Stanley,	Americus, Lyon.
Z. Stedman,	Summerfield, Marshall.
Mitchel Brant Stevenson,*	Birmingham, Jackson.
Arthur Leroy Stickney,	Stickney, Barton.
David W. Stockton,	Macyville, Cloud.
John A. Strange,	Rossville, Shawnee.

*Deceased.

Name.	Post-office and county (or state).
Arthur Lemar Strohl,	Isabell, Barber.
Anshelm J. Strom,	Dwight, Morris.
Ernest Felix Swanson,	Hollis, Cloud.
Hattie M. Teel,	Wabaunsee, Wabaunsee.
Edith Wynne Thomas,	Bala, Riley.
Harry Thompson,	Garrison, Pottawatomie.
John Bert Thompson,	Leon, Butler.
Albert Francis Tilton,	Grantville, Jefferson.
Joseph Miller Tomson,	Dover, Shawnee.
Henry Toothaker,	Wheaton, Pottawatomie.
Netta V. Trobert,	Manhattan, Riley.
Hayes J. Truax,	Peabody, (Harvey).
Elliott Garfield VanEveren,	Manhattan, Riley.
Karl VanSickle,	Fancy Creek, Clay.
August Wilhelm Wahl,	Wheaton, Pottawatomie.
Herman C. Wahl,	Wheaton, Pottawatomie.
Jay Waller,	Marquette, McPherson.
Joseph Franklin Weed,	Athol, Smith.
Julia Verona Wendel,	Beattie, Marshall.
Thomas Wendel,	Beattie, Marshall.
Jesse Thomas West,	Soldier, Jackson.
Ralph Richard White,	Newton, Harvey.
Thomas F. White,	Little River, Rice.
Lloyd Wilcox,	Green, Clay.
Arthur N. Wilhelm,	Mount Hope, Sedgwick.
Harry Edwin Williams,	Grantville, Jefferson.
Arthur Ward Willits,	Kensington, Smith.
Arthur L. Wilson,	Manhattan, Riley.
Frank Edwin Wilson,	Tonganoxie, Leavenworth. ¹
Fred Wolfe,	Kensington, Smith.
Cora E. Wood,	Freeport, Harper.
John Perry Wood,	Freeport, Harper.
Zach Woods,	Kensington, Smith.
Jay G. Worswick,	Oskaloosa, Jefferson.
Hannah Worthington,	Americus, Lyon.
Louis Wyland,	De Soto, Johnson.
Whitman Young,	Summerfield, Marshall.
John Arthur Zehrung,	Adrian, Jackson.
William Edward Zirkle,	Richland, Shawnee.
Samuel Zook,	Minneapolis, Ottawa.

SPECIAL STUDENTS.

Lewis O. Arnold,	Narka, Republic.
Gertrude A. Barnes,	Blue Rapids, Marshall.
George Warren Bemis,	Cawker City, Mitchell.
Margaret Butterfield,	Manhattan, Riley.
J. Dale Graham,	Le Roy, Coffey.
Lester Hatch,	Seneca, Nemaha.
Marie Hjort,	Council Grove, Morris.
William Flack Lower,	Council Grove, Morris.
Floyd Lucas,	Little River, Rice.

Name.	Post-office and county (or state).
Minnie May McCleary,	Beloit, Mitchell.
J. F. Mitchell,	Burlingame, Osage.
Archie E. Moore,	Manhattan, Riley.
Ruthford Brockway Peck,	Oakland, Shawnee.
Lewellyn Victor Putnam,	Manhattan, Riley.
Richard Reece,	Lawrence, Douglas.
(Mrs.) Edith M. Rice,	Keats, Riley.
Florence Rebecca Ritchie,	Manhattan, Riley.
R. E. Rosenstein,	Manhattan, Riley.
(Mrs.) Minnie L. Sondergard,	Manhattan, Riley.
Thomas F. Srackangast,	Little River, Rice.
Charles Elliott Woodbury,	Cawker City, Mitchell.

HOSPITANTS.

Will Kimble,	Alma, Wabaunsee.
Otto Christian Weyer,	Baileyville, Nemaha.

DAIRY STUDENTS.

Walter Willis Alspaugh,	Floral, Cowley.
Carol J. Barlow,	Blue Rapids, Marshall.
J. Elmer Baumbaugh,	Moonlight, Dickinson.
Thomas Harrison Brock,	Central City, Anderson.
Oscar C. Brownlee,	Lawrence, Douglas.
Chester R. Cooley,	Manhattan, Riley.
Adam H. Darby,	Iuka, Pratt.
Daniel Alfred Darroch,	Fredericksburg, Texas.
Mark Hanna Davis,	Central City, Anderson.
Harry W. Dedrick,	Irving, Marshall.
Charles Morton Dole,	Dolespark, McPherson.
James Albert Douglass,	Strawberry, Washington.
Bert Dull,	Washington, Washington.
Marquis Roy Easton,	Gage, Kingman.
Frank F. Givens,	Grantville, Jefferson.
Jot S. Givens,	Grantville, Jefferson.
Guy D. Gould,	Solomon, Dickinson.
James Gray,	Jasper, Missouri.
John James Healey,	Wallace, Wallace.
Henry Andrew Hoffman,	Andale, Sedgwick.
Theodore William Jensen,	Mingo, Thomas.
Daniel Pierce Johnson,	Lyndon, Osage.
Frank Sidney Johnson,	Melvern, Osage.
Guy D. Johnson,	Delphos, Ottawa.
Oscar A. Juelke,	Larkin, Jackson.
J. W. Keller,	Grantville, Jefferson.
John Ira Lewis,	Lucas, Russell.
Oscar W. Lohn,	Bertrand, Nebraska.
Frank McIntosh,	Ramona, Marion.
Omer R. McMillen,	Barclay, Osage.
Marshall H. Matts,	Homewood, Franklin.
Otto Rownd Mechem,	Norwood, Franklin.
William T. Merilatt,	Ramona, Marion.

Name.	Post-office and county (or state).
Jesse D. Metsker,	Alfred, Douglas.
J. W. Mills,	Topeka, Shawnee.
Delbert Morning,	Parsons, Labette.
Dudley Morrow,	Blue Rapids, Marshall.
A. J. Myers,	Americus, Lyon.
James E. Nodurft,	Lyons, Rice.
Lyman F. Norton,	Putnamville, <i>Pennsylvania</i> .
Charles William Overlander,	Highland, Doniphan.
J. P. Overlander,	Highland, Doniphan.
A. F. Packard,	Chapman, Dickinson.
George Benton Parrack,	Riley, Riley.
Ernest Byron Patten,	Silver Lake, Shawnee.
Sidney B. Pray,	Goddard, Sedgwick.
William H. Putnam,	Manhattan, Riley.
Ira Radcliff,	Overbrook, Osage.
George Stephen Regenold,	Peterton, Osage.
Walter E. Reynolds,	Steele City, <i>Nebraska</i> .
Harry Richards,	Barclay, Osage.
Henry Edward Richter,	Summerfield, Marshall.
Harvey L. Riley,	Stafford, Stafford.
John Charles Rosacker,	Stafford, Stafford.
George Rumold,	Dillon, Dickinson.
Jay Latimer Smith,	Osawkie, Jefferson.
John William Smith,	Michigan Valley, Osage.
Walter Hayward Spencer,	Yates Center, Woodson.
C. A. Stauffer,	Kanona, Decatur.
George Palmer Stubbs,	Dwight, Morris.
Charles W. Thompson,	Edgerton, (Miami).
Jess Tuttle,	Lone Star, Douglas.
Frank Edwin Uhl,	Gardner, Johnson.
Roy Bingham Vrooman,	Parsons, Labette.
Fred Dorcy Waters,	Manhattan, Riley.
Roscoe White,	Morehead, Neosho.
George Edwin Williams,	Hoganville, Graham.
Herbert Morton Williams,	Manhattan, Riley.
Charles Clarence Winsler,	Abilene, Dickinson.
John William Woodburn,	White Water, Butler.
Jay G. Worswick,	Oskaloosa, Jefferson.
Dennis P. Yoder,	Walton, Harvey.

FARMERS' SHORT-COURSE STUDENTS—SECOND TERM.

William Thomas Baird,	Arkansas City, Cowley.
Ira Roscoe Berkey,	Cleveland, <i>Missouri</i> .
Homer Mathew Brownlee,	Lawrence, Douglas.
Burchard Deluna Courter,	Downs, Osborne.
Edward Doll,	Larned, Pawnee.
Charles C. Frevert,	Holyrood, Ellsworth.
Charles Alpha Gage,	Mont Ida, Anderson.
Loren Kiser,	Andale, Sedgwick.
Frank Jem Lundstedt,	Lindsborg, McPherson.
Herbert William Nafziger,	Narka, Republic.

Name.	Post-office and county (or state).
John William Oman,	Walsburg, Riley.
Shirley Howard Pearce,	Stockdale, Riley.
John W. Tredway,	La Harpe, Allen.
Charles VanDalsem,	Fairview, Brown.
William Walker White,	Newton, Harvey.
George Grant Wilson,	Newton, <i>Illinois</i> .

FARMERS' SHORT-COURSE STUDENTS—FIRST TERM.

Gustave Anderson,	Vermillion, Marshall.
George Clinton Austen,	Lucas, Russell.
Charles M. Baird,	Arkansas City, Cowley.
Harrison Roy Betz,	Chapman, Dickinson.
Herbert R. Blair,	Solomon, Saline.
William Branstine,	Long Island, Phillips.
Richard E. Brown,	Whiting, Jackson.
Cecil M. Clark,	Manhattan, Riley.
Stanley Penrhyn Clark,	Manhattan, Riley.
John J. Clydesdale,	Gaylord, Smith.
Olin J. Coleman,	Rose Hill, Butler.
Norman W. Cook,	Effingham, Atchison.
Bernard Copeland,	Idana, Clay.
William C. Cummings,	Hesston, Harvey.
Harold Dahl,	Webber, Jewell.
Frank J. Deming,	Bonner Springs, Wyandotte.
Paul Dilts,	Hesston, Harvey.
Torrance Edward Donley,	Oxford, Sumner.
William Loren Eggen,	Manhattan, Riley.
Bernard A. Felton,	McPherson, McPherson.
Joseph Arthur Fleming,	Garfield, Pawnee.
William Frevert,	Holyrood, Ellsworth.
John Earnest Funk,	Homewood, Franklin.
Emil J. Gfeller,	Alida, Geary.
Clyde Allan Gibbons,	Manhattan, Riley.
Harold B. Giles,	Green, Clay.
Louis Milton Gilman,	Leavenworth, Leavenworth.
Roy Gilmore,	Oneida, Nemaha.
John Goode,	Lenexa, Johnson.
Joseph Goode,	Lenexa, Johnson.
Walter E. Green,	Mentor, Saline.
Stuart Groves,	Fredonia, Wilson.
John Guise,	Oneida, Nemaha.
Otis Ward Hamilton,	Independence, Montgomery.
Victor Emanuel Hanson,	Olsburg, Pottawatomie.
Arthur Clair Hatch,	Colwich, Sedgwick.
Hector Wilson Hill,	Maple Grove, <i>Missouri</i> .
Clyde A. Hobson,	Hardy, <i>Nebraska</i> .
Clifford Holliday,	Freeport, Harper.
Joe Hovel,	Cuba, Republic.
Orlin Hudson,	Fredonia, Wilson.
J. Arthur Hutchinson,	Bellaire, Smith.
Fred J. Jagger,	Minneapolis, Ottawa.

Name.	Post-office and county (or state).
Axel Ferdinand Johnson,	Morganville, Clay.
William F. Kerr,	Idana, Clay.
John Edward Kurtenbach,	Herington, Dickinson.
D. B. Langenwalter,	Halstead, Harvey.
Martin Larson,	Vesper, Lincoln.
David Edwin Leshner,	Morrowville, Washington.
Paul A. Maier,	Central City, Anderson.
Albert J. Manz,	Alida, Geary.
J. Fred Marvin,	Olathe, Johnson.
William F. Marx,	Bushong, Lyon.
William Wesley Mason,	Belle Plaine, Sumner.
Charles Meckenstock,	Agenda, Republic.
Philip E. Mentzer,	Yates Center, Woodson.
Cloyd B. Miller,	Seneca, Nemaha.
John Thomas Moulds,	Halstead, Harvey.
Carl Nelson,	Lovewell, Jewell.
Edward V. Nelson,	Riley, Riley.
Harry E. Odell,	Fredonia, Wilson.
Ernest Samuel Pangburn,	Waldo, Russell.
James L. Pearson,	Sterling, Reno.
George R. Peck,	Little River, Rice.
Harry Starr Powell,	Frankfort, Marshall.
William M. Powell,	Republic City, Republic.
Otto Prymek,	Cuba, Republic.
Charles Clinton Randle,	Bala, Riley.
Benjamin C. E. Roberson,	Belle Plaine, Sumner.
Earl Rouse,	Cawker City, Mitchell.
Carl W. Rutty,	Meriden, Jefferson.
Frank Oscar Sandberg,	Roxbury, McPherson.
Arthur Schlaegel,	Oneida, Nemaha.
Elden Scott,	Ionia, Jewell.
Charles W. Setzer,	Goddard, Sedgwick.
Leroy Elsworth Sharer,	Monument, (Thomas).
Luther Henry Sharer,	Monument, Logan.
Henry Oliver Shomber,	Homewood, Franklin.
Ward Simon,	Corning, Nemaha.
Charles F. Stowe,	Lawrence, Douglas.
Robert James Tague,	Banner, Trego.
Charles Thestrup,	Williamsburg, Franklin.
William Dole True,	Mankato, Jewell.
Iverson Uitts,	Independence, Montgomery.
Theron VanScoter,	Irving, Marshall.
Karl VanSickle,	Fancy Creek, Clay.
Joseph Harry Wallace,	Talmage, Dickinson.
Ralph Kirkland Ware,	Manhattan, Riley.
Frank R. Weisgerber,	Mentor, Saline.
Ira Dean Whitaker,	Chiles, Miami.
Arthur N. Wilhelm,	Mount Hope, Sedgwick.
Ernest Withington Young,	Lawrence, Douglas.
John Arthur Zehrung,	Adrian, Jackson.

DOMESTIC SCIENCE SHORT-COURSE STUDENTS—SECOND TERM.

Name.	Post-office and county (or state).
Ruth Barlow,	Manhattan, Riley.
Sarah Davis,	Manhattan, Riley.
Emma Goodpasture,	Alma, Wabaunsee.
Elvira Hawkinson,	Marquette, McPherson.
Signa M. Ipsen,	Manhattan, Riley.
Delia Miriam Monroe,	Whiting, Jackson.
Martha R. Mortimer,	Gypsum City, Saline.
Sadie Eliza Rathbone,	Manhattan, Riley.
(Mrs.) W. D. Silkman,	Manhattan, Riley.
Grace Dollie Smith,	Manhattan, Riley.
Rose S. Thompson,	Garrison, Pottawatomie.
Lottie Townsend,	Westmoreland, Pottawatomie.
Ida Tressin,	Gypsum City, Saline.
Margaret Elizabeth Woodford,	Maple Hill, Wabaunsee.
Alta L. Worley,	Natoma, Osborne.

DOMESTIC SCIENCE SHORT-COURSE STUDENTS—FIRST TERM.

Cora May Baird,	Marquette, McPherson.
Geneva Berggren,	Morganville, Clay.
Emma Bork,	Axtell, Marshall.
Margaret Kathleen Chambers,	Morse, Johnson.
Anna B. Cole,	Manhattan, Riley.
Emma Dole,	Canton, McPherson.
Carrie O. Doll,	Larned, Pawnee.
Caroline Erickson,	Axtell, Marshall.
Belle Ferguson,	Frankfort, Marshall.
Maggie L. Gardenhire,	Alma, Wabaunsee.
Dorothy Gehrett,	Atchison, Atchison.
Barbara Elizabeth Grimm,	Bonaccord, Dickinson.
Anna Hawkinson,	Randolph, Riley.
Lucretia Helscher,	Paradise, Russell.
Nora Ipsen,	Randolph, Riley.
Signa J. Ipsen,	Randolph, (Pottawatomie).
D. Pluma Kelly,	Lyndon, Osage.
Anna Daisy Kessler,	Topeka, Shawnee.
Cecelia Larson,	Vesper, Lincoln.
Jennie E. McAninch,	Manhattan, Riley.
Cora Mae Mitchell,	Burlingame, Osage.
Katherine Belle Morgan,	Phillipsburg, Phillips.
Mary Edith Morrow,	Blue Rapids, Marshall.
Anna Mathilda Nelson,	Tescott, Ottawa.
Mathilda Olson,	Marquette, McPherson.
Minnie Allen Peterson,	Marquette, McPherson.
Jennie Rogler,	Matfield Green, Chase.
Mabel M. Rooney,	Fairview, Brown.
Lizzie Minerva Soupene,	Manhattan, Riley.
Flora I. Stewart,	Media, Douglas.
Mary Teel,	Wabaunsee, Wabaunsee.
Laura Bell Ware,	Manhattan, Riley.

APPRENTICES IN SHOPS.

Name.	Post-office and county (or state).
Will A. Barker,	Holton, Jackson.
David T. Bengstrom,	McPherson, McPherson.
John Borgstrom,	Lindsborg, McPherson.
Eben D. Brockway,	Wellsville, Franklin.
Fred Buckmaster,	Manhattan, Riley.
Chester A. Campbell,	Hammond, Bourbon.
Axel Leonard Carlson,	Morganville, Clay.
Albert V. Compton,	Willis, Brown.
Richard J. Courter,	Downs, Osborne.
James I. Cunningham,	Beattie, Marshall.
Harvey Benton Davidson,	Agricola, Coffey.
Eli Burton Fields,	Manhattan, Riley.
Alex J. Fraser,	Peabody, Marion.
Newton Staley Gall,	Reserve, Brown.
Elmer Gardner,	Clifton, Clay.
D. N. Gish,	Bainbridge, <i>Pennsylvania</i> .
J. Charles Green,	Windom, McPherson.
Fred J. Griffing,	Topeka, Shawnee.
Joseph Alexander Guild,	Silver Lake, Shawnee.
Carl Ernest Gustafson,	McPherson, McPherson.
William Alfred Gustafson,	McPherson, McPherson.
William Hargrave,	Belvue, Pottawatomie.
William Morrill Hite,	Baker, Brown.
Herbert W. Homan,	Lucas, Russell.
Charles Clinton Howenstine,	Manhattan, Riley.
David Jacobson,	Morganville, Clay.
Fred Ed. Jacobson,	Norway, Republic.
Alvin E. Johnson,	Newton, Harvey.
George R. Johnson,	Axtell, Marshall.
Willis Harmon Johnson,	Codell, Rooks.
A. L. Johnston,	Manhattan, Riley.
Frank George Jolley,	Onaga, Pottawatomie.
Bert McClelland,	Maple Hill, Wabaunsee.
Everett N. McLeod,	Marysville, Marshall.
Abner H. McManis,	Beloit, Mitchell.
Erastus Irwin Mallory,	Hoisington, Barton.
Howard B. Mell,	Baker, Brown.
Earle B. Millard,	Manhattan, Riley.
George C. Milne,	Peabody, Marion.
Thomas Harry Mintier,	Neely, Leavenworth.
Harlan L. Mitchell,	Haddam, Washington.
Roland Calvin Mitchell,	Florence, Marion.
George H. Mogge,	Halifax, Wabaunsee.
Arnold Nelson,	Greenleaf, Washington.
Fred Cranston Nicholson,	Manhattan, Riley.
Oscar N. Olson,	Vermillion, Marshall.
Walter E. Pangburn,	Waldo, Russell.
Fred. Augusta Patterson,	Cottonwood Falls, Chase.
Arthur Alexander Raymond Perrine,	Newton, Harvey.

Name.	Post-office and county (or state).
George Piper,	Emporia, Lyon.
Joseph W. Raida,	Adams, Kingman.
Elmer Rask,	McPherson, McPherson.
Charles P. Ritchie,	Manhattan, Riley.
George W. Rundell,	Stafford, Stafford.
Edward Arthur Saint,	Lyons, Rice.
Granville Bond Scanland,	Randall, Jewell.
Harry Allen Shuyler,	Nickerson, Reno.
Harry E. Smith,	Wichita, Sedgwick.
Benjamin B. Stauffer,	South Haven, Sumner.
George W. Stevens,	Humboldt, Allen.
Eddie L. Strong,	Manhattan, Riley.
Hiram Webster Strong,	Goddard, Sedgwick.
Oscar William Strum,	Clifton, Clay.
Hayes J. Truax,	Peabody, Harvey.
Frank Henry VonCleave,	Wymore, <i>Nebraska</i> .
Axel Walstrom,	Osage City, (Lyon).
David B. Weaver,	Phelps, Atchison.
Albert Chauncey Williams,	Manhattan, Riley.
Frank E. Williams,	Cuba, Republic.
Dennis P. Yoder,	Walton, Harvey.
Edward J. Young,	Paola, Miami.

APPRENTICES IN PRINTING.

Amy Alena Allen,	Manhattan, Riley.
Charles Albert Barr,	Manhattan, Riley.
Clyde C. Brindley,	Peabody, Marion.
J. F. Mitchell,	Burlingame, Osage.
Sidney M. Morrison,	Great Bend, Barton.
Elmer E. Randel,	Corning, Nemaha.
Jesse Clyde Rickman,	Manhattan, Riley.
James Monroe Trobert,	Kelly, Nemaha.

SUMMARY.

CLASSES.	Gentlemen.	Ladies.	Totals.
Postgraduate	16	24	40
Fourth year	38	36	74
Third year	56	24	80
Second year	122	61	183
First year	237	111	348
Preparatory	256	62	318
Special	14	7	21
Hospitants	2	.....	2
Dairy	72	.....	72
Farmers' short course	109	.....	109
Domestic science short course . . . . .	.....	47	47
Apprentices	78	1	79
Counted twice	45	7	52
Totals	957	366	1,323

From 85 counties of Kansas, 1,261.

From 20 other states, 60.

RECORD OF ATTENDANCE, 1879-1901.

COLLEGE YEAR.	Domestic science short course	Domestic science long course	Dairy	Apprentice	Hospitality	Special	Preparatory*	First year	Second year	Third year	Fourth year	Postgraduate	Counted twice	Total	Graduated
1878-79	1	...	89	89	16	12	...	...	207	9
1879-80†	1	...	166	61	35	11	2	...	276	7
1880-81‡	6	...	178	48	24	9	2	...	267	8
1881-82	5	...	227	50	19	11	...	...	312	9
1882-83	4	...	241	60	30	12	...	...	347	12
1883-84	2	...	255	92	26	18	2	...	395	17
1884-85	2	...	271	71	36	16	5	...	402	14
1885-86	1	...	273	91	35	24	4	...	428	21
1886-87	303	100	44	24	10	...	481	21
1887-88	305	92	46	27	2	...	472	22
1888-89†	266	103	41	28	7	...	445	25
1889-90	1	...	307	105	63	28	10	...	514	27
1890-91†	343	135	50	53	12	...	593	52
1891-92	336	139	62	37	10	...	584	35
1892-93	339	110	66	43	29	...	587	39
1893-94	275	141	72	42	25	...	555	39
1894-95	5	...	276	108	89	64	30	...	572	57
1895-96	3	...	353	121	67	71	32	...	647	66
1896-97*	6	67	321	163	69	62	46	...	734	55
1897-98	6	9	...	15	77	316	174	77	82	57	10	803	69
1898-99	26	35	...	40	110	306	177	92	65	40	20	871	53
1899-00†	24	47	51	50	...	32	162	375	163	109	69	27	22	1,094	58
1900-01	47	109	72	79	2	21	318	348	183	80	74	40	52	1,320	...

* Previous to 1896-'97 the preparatory students were not listed separately from the first-years.

† Requirements for admittance raised.

‡ Course strengthened.

Graduates.

This list is made from the best data obtainable. A favor will be conferred by notifying the College Secretary of any errors or changes.

1867.

Henry L. Denison, A. M., 1257 Clarkson street, Denver, Colo. Official stenographer.
 Belle M. (Haines) Pond, A. M., 1821 Clay street, Topeka, Kan. Housewife.
 Emma L. (Haines) Bowen, A. M., Manhattan, Kan. Housewife.
 John J. Points, A. M., Omaha, Neb. Lawyer.
 Martha A. (White) Abbott, A. M., 283 South Oakley avenue, Chicago, Ill. Housewife.

1871.

Emily M. (Campbell) Robinson, A. B. Died in 1877.
 Ella F. (Denison) Whedon, A. B., Lincoln, Neb. Housewife.
 Luella M. Houston, A. B., Galveston, Tex. Milliner and dressmaker.
 Charles O. Whedon, B. S., 1845 D street, Lincoln, Neb. Lawyer.
 Kate E. (White) Turley, A. B., Chicago, Ill. Housewife.

1872.

Theophania M. (Haines) Huntington, A. B. Died in 1880.
 Albert Todd, A. M., Manila, P. I. Captain, Sixth U. S. artillery.
 S. Wendell Williston, A. M., M. D., Ph. D., Lawrence, Kan. Dean of medical school, University of Kansas.

1873.

Eliza Z. (Davis) Stringfield, A. B., 1111 Santee street, Los Angeles, Cal. Housewife.
 Sam Kimble, A. B., Manhattan, Kan. Lawyer.

1874.

Harry A. Brous, A. M., M. D., Manhattan, Kan. Physician.
 Edgar F. Clark, A. B., New Whatcom, Wash. Lawyer.
 John E. Davis, B. S., D. D. S., 737 Oak street, Columbus, Ohio. Dentist.
 William D. Gilbert, A. B., Atchison, Kan. Lawyer.
 A. Judson White, A. B., Manhattan, Kan. Minister.

1875.

Reuben E. Lofinck, B. S., Manhattan, Kan. Merchant.
 Alice E. (Stewart) Points, A. M., 128 Bright street, Jersey City, N. J. Teacher.

1876.

George A. Gale, A. B., Mangona, Fla. Merchant and postmaster.
 Ella M. (Gale) Kedzie, A. B., Lansing, Mich. Teacher of art.
 Nellie (Sawyer) Kedzie, M. S., Peoria, Ill. Professor of domestic economy, Bradley Polytechnic Institute.
 Carrie M. Kimball, A. B., Garden Grove, Cal. Art instructor.
 Minerva E. (Whitman) Heiser, A. B., Lyndon, Kan. Housewife.

1877.*

Ella S. Child, Manhattan, Kan. Dressmaker.
 George H. Failyer, M. S., Manhattan, Kan. Farmer.
 John S. Griffing, M. S., Manhattan. Teacher.
 Walter C. Howard, Penryn, Placer county, California. Minister.
 Frederick O. Hoyt. Died in 1884.
 Louis E. Humphrey, Chapman, Kan. Druggist.
 James F. La Tourette, Idaho Springs, Colo. Miner.
 Marion F. Leasure, LL. B., La Cygne, Kan. Lawyer.
 William Ulrich, M. S., Manhattan, Kan. Contractor and builder.

*B. S. has been granted all graduates since 1877.

1878.*

Albert N. Godfrey, M. S., Port Townsend, Wash. United States customs service.
 Charles S. McConnell.
 George S. Platt. Died in 1878.
 Amos E. Wilson, Leavenworth, Kan. Banker.

1879.*

Arthur T. Blain, Lacanada, Cal. Nurseryman.
 Etta (Campbell) Blain, Lacanada, Cal. Housewife.
 Wilmer K. Eckman, Longview, Tex. Bank cashier.
 Corvin J. Reed, St. Clere, Kan. Farmer.
 Harry C. Rushmore, 735 Lincoln street, Topeka, Kan. Commercial traveler.
 Wm. H. Sikes, Leonardville, Kan. Merchant and grain dealer.
 Lewis A. Salter, Alva, Okla. Lawyer.
 Ella (Vincent) McCormick, Clay Center, Kan. Bookkeeper.
 Clarence E. Wood, A. B., Erwin, Okla. Farmer.

1880.*

Augustine Beacham.
 Lizzie R. (Cox) Kregar, Milford, Kan. Housewife.
 Emma (Hoyt) Turner, Peru, Ill. Housewife.
 Emma (Knotman) Huse, Manhattan, Kan. Housewife.
 Grace (Parker) Perry, Pocatello, Idaho. Housewife.
 Noble A. Richardson, San Bernardino, Cal. Superintendent of city schools.
 Maria E. (Sickels) Davis, Chicago, Ill. Housewife.

1881.*

Flora (Donaldson) Reed, St. Clere, Kan. Housewife.
 Ulysses G. Houston, Kingfisher, Okla. Lecturer.
 Fletcher M. Jeffrey, Cripple Creek, Colo. Lawyer.
 William J. Jeffrey. Died in 1900.
 Darwin S. Leach, ———, Africa.
 William J. Lightfoot, 307 May avenue, Cripple Creek, Colo. Deputy United States mineral surveyor.
 Dalinda (Mason) Cotey, Logan, Utah. Professor of domestic arts, State Agricultural College of Utah.
 Wirt S. Myers, Tampa, Fla. Furniture manufacturer.

1882.*

J. Chester Allen. Died in 1885.
 Ida (Crawford) Sloan.
 Edward V. Cripps.
 Warren Knaus, M. S., McPherson, Kan. Editor.
 Mattie E. (Mails) Coons, Manhattan, Kan. Housewife.
 Allie S. (Peckham) Cordry, Minneapolis, Kan. Housewife and art teacher.
 Belle (Selby) Curtice, 604 American Bank building, Kansas City, Mo. Housewife.
 Burton L. Short, Kansas City, Kan. Assistant postmaster.
 John A. Sloan.

1883.*

James W. Berry, Jewell City, Kan. Lumberman.
 Mary C. Bower, Manhattan, Kan. Clerk.
 Lewis W. Call, LL. M., D. C. L., Washington, D. C. Chief clerk, judge-advocate general's office, United States war department.
 Emma E. Glossop, Sabetha, Kan. Teacher.
 William J. Griffing, Manhattan, Kan. Farmer and fruit-grower.
 Phoebe E. Haines, M. S., Manhattan, Kan. At home.
 Hortense L. (Houston) Martin, Miami, I. T. Housewife.
 Jacob Lund, M. S., Manhattan, Kan. Engineer, Kansas State Agricultural College.
 Katie I. (Meguire) Sheldon, Riverside, Cal. Housewife.
 J. Dana Needham, Lane, Kan. Merchant.
 Milan T. Ward, M. D., Orion, Ill. Physician.
 Julius T. Willard, M. S., Manhattan, Kan. Professor of applied chemistry, Kansas State Agricultural College; director Experiment Station.

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1884.*

Emmett S. Andress, Lakin, Kan. Farmer.
 Florence J. Brous, 704 St. Paul street, Kansas City, Kan. Teacher.
 Bartholomew Buchli, M. S., D. V. S., Alma, Kan. County clerk.
 John H. Calvin, L.L. B. Died in 1898.
 William A. Corey, Salt Lake City, Utah. Teacher and editor.
 Henry M. Cottrell, M. S., Manhattan, Kan. Professor of agriculture, Kansas State Agricultural College.
 Carrie F. (Donaldson) Brown, Portland, Ore. Housewife.
 Florence A. Donaldson. Died in August, 1888.
 Frank W. Dunn, Aultman, Colo. Assayer.
 I. Day Gardiner. Died in 1899.
 Edwin H. Kern, Cripple Creek, Colo. Mining engineer.
 Marion M. Lewis. Died in —.
 Charles L. Marlatt, M. S., 1440 Massachusetts avenue, Washington, D. C. First assistant in entomological division, United States department of agriculture.
 Lincoln H. Neiswender, Silver Lake, Kan. Farmer.
 Geo. C. Peck, Junction City, Kan. Feed dealer.
 Hattie L. (Peck) Berry, Jewell City, Kan. Housewife.
 John W. Shartel, Oklahoma City, Okla. Lawyer.

1885.*

Thomas Bassler, Batchelder, Okla. Horticulturist.
 Albert Deitz, 2402 Fairmount avenue, Kansas City, Mo. Merchant.
 George E. Hopper, M. S., Arkansas City, Kan. Superintendent of water-works.
 Florence F. Hough, Great Bend, Kan.
 Frank A. Hutto, Stillwater, Okla. Professor of history and economics, Oklahoma Agricultural and Mechanical College.
 J. Allen Lewis, M. S., C. E., 288 South Oakley avenue, Chicago, Ill. Civil engineer.
 Nellie J. Murphy, South Denver, Colo. Trained nurse.
 Arthur L. Noyes, Wabaunsee, Kan. Farmer.
 Clarence D. Pratt, Dallas, Tex. General agent paint company.
 Rollin R. Rees, Minneapolis, Kan. Attorney and member of legislature.
 Frederick J. Rogers, M. S., Leland Stanford, Cal. Instructor in physics, Leland Stanford Jr. University.
 Dorothy E. C. (Secrest) Hungerford, Randolph, Kan. Housewife.
 Grace Wonsetler, M. D., Chicago, Ill. Physician.
 Effie E. (Woods) Shartel, Oklahoma City, Okla. Housewife.

1886.*

Lillie B. Bridgman, M. S., Berkeley, Cal. Professor of physics, Lick Polytechnic.
 Louis P. Brous, M. S., Torrior, Mexico. Architect for Schwarzschild & Sulzberger Packing Company.
 Paul H. Fairchild, M. D., 100 William street, New York city. Publisher of medical journals, and president of Pulvola Chemical Company.
 Abbott M. Green, Adin, Cal. Civil engineer and teacher.
 James G. Harbord, M. S., Santiago, Cuba. Lieutenant, Tenth cavalry, U. S. A.
 John U. Higginbotham, National Home Insurance building, 205 La Salle street, Chicago, Ill. Cashier National Biscuit Company.
 Maria C. (Hopper) Getty, Downs, Kan. Housewife.
 E. Ada (Little) MacEwan, Logan, Utah. Housewife.
 Frank L. Parker, Hutchinson, Kan. Merchant.
 Edward H. Perry, Perry, Okla. Editor and publisher.
 H. Augustus Platt, St. Joseph, Mo. Commercial traveler.
 Ada H. (Quinby) Perry, Perry, Okla. Housewife.
 Ida H. (Quinby) Gardiner, Manhattan, Kan. Housewife.
 Minnie Reed, M. S., Santa Ana, Cal. Teacher in high school.
 David G. Robertson, 948 and 950 Marquette building, 204 Dearborn street, Chicago, Ill. Lawyer.
 Edward O. Sisson, Peoria, Ill. Director Bradley Polytechnic Institute.
 John W. Van Deventer, Sterling, Colo. Editor and publisher.
 George W. Waters, Dillon, Colo. Ranchman.
 William E. Whaley, 5418 Greenwood avenue, Chicago, Ill. Instructor in history, South Side school.
 F. Henrietta (Willard) Calvin, Topeka, Kan. Topeka city library.
 John L. Wise, Smithboro, Ill. Merchant.

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1887.*

Edgar A. Allen, Albuquerque, N. M. Superintendent of Indian school.
 Fred H. Avery. Died in 1896.
 Claude M. Breese, M. S., Manhattan, Kan. County clerk.
 John B. Brown, M. S., Pine Ridge, Neb. Teacher, Indian school.
 Walter J. G. Burtis, Fredonia, Kan. Farmer.
 Mark A. Carleton, M. S., Washington, D. C. Cerealist, division of vegetable physiology and pathology, United States department of agriculture.
 Nellie E. (Cottrell) Stiles, Fullerton, Cal. Housewife.
 Bert R. Elliott, Dawson City, Alaska. Miner.
 Frederick B. Elliott, Manhattan, Kan. Real-estate and insurance agent.
 Clara M. Keyes, Warner, Cal. Teacher.
 Fred. G. Kimball, St. Michaels, Alaska. Chief postal clerk.
 Frederick A. Marlatt, Manhattan, Kan. Proprietor Blue Valley Manufacturing Company.
 William J. McLaughlin, Randolph, Utah. Editor.
 Mary E. Moses, Manhattan, Kan. At home.
 Charles A. Murphy, Clay Center, Kan. Teacher of science, Clay county high school.
 Orlando G. Palmer, L.L.M., Alva, Okla. Professor of history and civics, Northwest Territory Normal School.
 Louis B. Parker. Died in 1889.
 James E. Payne, M. S., Cheyenne Wells, Colo. Superintendent Rain Belt Experiment Station.
 Seward N. Peck, Topeka, Kan. Cabinet-maker, railroad shops.
 George N. Thompson, Belmond, Iowa. Mechanic.
 Willis M. Wright, Jennings, La. Farmer.

1888.*

Grant Arnold, Toledo, Wash. Teacher.
 Bertha H. Bacheller, M. S., Kansas City, Mo. Teacher of domestic science, manual training school.
 Clement G. Clarke, Plainville, Conn. Minister.
 Alexander C. Cobb, Wagoner, I. T. Farmer and carpenter.
 Mattie (Cobb) Clarke, Plainville, Conn. Housewife.
 Minnie H. Cowell.
 Lyman H. Dixon, Buffalo, N. Y. Architect.
 David G. Fairchild, M. S., Washington, D. C. Agricultural explorer, department of agriculture.
 Carl E. Friend, Soldier, Kan. Banker.
 John R. Harrison, Washington, D. C. Post-office inspector.
 Humphrey W. Jones, 1251 Lincoln street, Topeka, Kan. Teacher of music in city schools.
 Nathan E. Lewis, 149 East Fifth street, Plainfield, N. Y. Draughtsman.
 Abbie L. Marlatt, M. S., 261 Benefit street, Providence, R. I. Teacher of domestic science, manual training school.
 William C. Moore, Junction City, Kan. Editor and publisher.
 Ernest F. Nichols, Hanover, N. H. Professor of physics, Dartmouth College.
 Harry E. Robb, Eureka, Kan. Farmer and county surveyor.
 Anna Synder, Emporia, Kan. Student, State Normal School.
 Edwin H. Snyder, Denver, Colo. Editor and publisher.
 Oliver L. Utter, 72 Mount Vernon street, Boston, Mass. Student in Boston University.
 Aaron Walters. Died in 1892.
 Lora L. (Waters) Beeler, M. S., 2469, N. Springfield avenue, Irving Park, Chicago, Ill. Housewife.
 Daniel W. Working, jr., box 432, Denver, Colo. Farmer.

1889.*

Emma A. Allen. Died in 1891.
 Joseph W. Bayles, Manhattan, Kan. Farmer.
 Walter R. Browning, Padonia, Kan. Grain dealer.
 David E. Bundy, ——. Minister.
 Samuel S. Cobb, Wagoner, I. T. Cattle dealer.
 Judson H. Criswell, Mnnhattan, Kan. Sales clerk.
 Mattie I. (Farley) Carr, Winthrop, Wash. Housewife.
 Clarence E. Freeman, M. S., Chicago, Ill. Associate professor electrical engineering and technology, Armour Institute.
 Hattie L. (Gale) Sanders, Mangona, Fla. Housewife.
 John S. Hazen, Springfield, Mo. United States weather bureau observer.
 Albert B. Kimball, Scandia, Kan. Editor and postmaster.

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William Knabb, Hiawatha, Kan. Assistant bank cashier.
 Mary C. Lee, Manhattan, Kan. At home.
 Alonzo A. Mills, Kamas, Utah. Manager of creamery.
 Susan W. Nichols, 637 North Tenth street, St. Joseph, Mo. Music teacher.
 Walter H. Olin, M. S., Ottawa, Kan. Superintendent of city schools.
 Eli M. Paddleford, Highland, Kan. Minister.
 Maude F. (Sayers) DeLand, 4610 Forbes street, Pittsburg, Pa. Housewife.
 Florine (Secrest) Linderman, Willow Glen, San Jose, Cal. Housewife.
 Stanley Snyder, Oskaloosa, Kan. Farmer.
 Charles W. Thompson, Holton, Kan. Dentist.
 Jane C. Tunnell, Aspen, Colo. Teacher, city schools.
 Ina M. (Turner) Bruce, St. Louis, Mo. Housewife.
 Robert U. Waldraven, Rosedale, Kan. Minister.
 Henry S. Willard, M. D., Manhattan, Kan. Physician and druggist.

1890.*

Samuel I. Borton, Rocky Ford, Colo. Farm superintendent, American Sugar Beet Company, and postgraduate student, Kansas State Agricultural College.
 Frank A. Campbell, Highlands, Colo. Reporter.
 Arthur F. Cranston, Parsons, Kan. Lawyer.
 John Davis, Alva, Okla. Professor of English and literature, Oklahoma Normal School.
 Grant W. Dewey, Manhattan, Kan. Photographer.
 Charles J. Dobbs, 1217 Benny Way, Seattle, Wash. Lawyer.
 Charles W. Earle, 917 E street, Denver, Colo. Advertising agent.
 Schuyler C. Harner, Leonardville, Kan. Teacher and farmer.
 John W. Ijams, Orlando, Okla. Teacher.
 Bertha S. (Kimball) Dickens, M. S., Manhattan, Kan. Housewife.
 Harriet E. (Knipe) Curtis, Council Grove, Kan. Housewife, and postgraduate Kansas State Agricultural College.
 Nellie P. (Little) Dobbs, 1217 Benny Way, Seattle, Wash. Housewife.
 Ellsworth Thomas Martin, L.L.B., Chicago, Ill. Lawyer.
 Silas C. Mason, M. S., Berea, Ky. Professor of horticulture and biology, Berea College.
 Wilton L. Morse, Mancos, Colo. Farmer.
 Albert E. Newman, Watonga, Okla. County superintendent and editor.
 Julia R. Pearce, Berkeley, Cal. Student and assistant in University of California.
 Emil C. Pfuetze, Manhattan, Kan. Lumber dealer.
 William H. Sanders, Mangona, Fla. Plumber and builder.
 Emma Secrest, A. M. Died in 1898.
 Marie Barbara Senn, M. S., Fargo, N. Dak. Instructor in domestic economy, North Dakota Agricultural College.
 Ralph Snyder, Oskaloosa, Kan. Farmer and stockman.
 George E. Stoker, A. B., Topeka, Kan. Lawyer.
 Walter T. Swingle, M. S. Traveling in Africa for division of vegetable pathology, United States department of agriculture.
 Gilbert J. Van Zile. Died in 1899.
 Harry N. Whitford, Botany building, Chicago, Ill. Instructor in Armour Institute, and student, University of Chicago.
 Thomas E. Wimer. Died in 1890.

1891.*

William Aaron Anderson, Kansas City, Mo. Bookkeeper.
 William Sherman Arbuthnot, D.V.S., Republic, Kan. Veterinary surgeon and druggist.
 Herman William Avery, Wakefield, Kan. Farmer and merchant.
 Judd Noble Bridgman, M. S., Leavenworth, Kan. Engineer.
 Robert James Brock, Manhattan, Kan. Lawyer and county attorney.
 Francis Charles Burtis, M. S., Stillwater, Okla. Professor of agriculture and horticulture, Oklahoma Agricultural and Mechanical College.
 Charles Albert Campbell, 1947 North Seventh street, Philadelphia, Pa. Minister.
 Spencer Norman Chaffee, Green, Kan.
 Clay Ephraim Coburn, 422 North Fourth street, Kansas City, Kan. Physician.
 Gertrude Coburn, Kansas City, Kan. At home.
 Tina Louise (Coburn) Tomson, Cedar Rapids, Iowa. Housewife.
 Rachel Callie (Conwell) Thoburn, Oklahoma City, Okla. Housewife.
 Christine Mossman Corlett, Guthrie, Okla. Teacher.

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Mary Emmeline (Cottrell) Payne, M. S., Cheyenne Wells, Colo. Housewife.
 Phil Sheridan Creager, Kansas City, Mo. Telegraph editor, *Kansas City Journal*.
 Kary Cadmus Davis, St. Cloud, Minn. Professor of botany, State Normal School.
 Thomas Clarke Davis, Benedict, Kan. Farmer.
 Helen Pearl (Dow) Peck, 112 Marlborough road, Brooklyn, N. Y. Housewife.
 Anna (Fairchild) White, 61 Poplar street, Brooklyn, N. Y. Housewife.
 Harry Benson Gilstrap, Chandler, Okla. Editor and publisher.
 Almon Arthur Gist, Fort Riley, Kan. Telegraph operator and station agent.
 Amy Myrtle (Harrington) Deibler, Leadville, Colo. Housewife.
 Delpha May Hoop, Manhattan, Kan. At home.
 Mayme Amelia (Houghton) Brock, Manhattan, Kan. Housewife.
 Willis Wesley Hutto, Manhattan, Kan. Teacher.
 George Victor Johnson, Sedan, Kan. Editor.
 Frank Mullett Linscott, D. V. S., Holton, Kan. Stock-raiser.
 Bessie Belle Little, Philadelphia, Pa. Teacher of physical culture, Bryn Mawr College.
 Albert Edward Martin, Streator, Ill. Manager telephone company.
 Nellie Evangeline (McDonald) Thayer, Manhattan, Kan. Housewife.
 David Collins McDowell, Elkton, Colo. Merchant.
 Alfred Midgley, Minneapolis, Kan. Clerk.
 Madeleine Wade Milner, 6514 Kimbark avenue, Chicago, Ill. Assistant librarian, Armour Institute.
 Paul Chambers Milner, 6514 Kimbark avenue, Chicago, Ill. Assistant exchange teller, Illinois Trust and Savings Bank.
 Harry Elbridge Moore, Kingfisher, Okla. Implement dealer.
 John Otis Morse, Mound City, Kan. Lawyer and clerk of district court.
 Hattie May Noyes, Wabaunsee, Kan. Teacher.
 Louise (Reed) Paddleford, Highland, Kan. Housewife.
 Artemus Jackson Rudy, Fresno, Cal. Fruit-raiser.
 Henry Vernon Rudy, Fresno, Cal. Fruit-raiser.
 Charlotte Jane (Short) Houser, M. S., Danville, Pa. Housewife.
 Ben Skinner, M. D., Fairview, Kan. Physician.
 Caroline Scott (Stingley) Van Blarcom. Died in 1899.
 Lillian Alice St. John, Manhattan, Kan. Teacher.
 Ellis Cheney Thayer, Manhattan, Kan. Farmer.
 Sam L. Van Blarcom, M. D., 817 Garfield avenue, Kansas City, Kan. Railway postal clerk.
 Frank Albert Waugh, M. S., Burlington, Vt. Professor of horticulture in Vermont University.
 Fannie Elizabeth (Waugh) Davis, M. S., St. Cloud, Minn. Housewife.
 Flora Emilie Wiest, Manhattan, Kan. Teacher.
 Bertha (Winchip) Spilman, 509 Second street, S. E., Washington, D. C. Housewife.
 Alfred Orin Wright, Jennings, La. Farmer.
 Effie Jeanetta Zimmerman, M. S., Moray, Kan. Journalist.

1892.*

Grace Maria Clark, M. S., Berea, Ky. Clerk in president's office, Berea College.
 George L. Clothier, M. S., Washington, D. C. Agent division of forestry, United States department of agriculture.
 Lillian Clyde Criner, McPherson, Kan. Editor.
 Harry Darnell, Kelso, Wash. Principal of schools.
 William H. Edelblute, Harrison, Idaho.
 Elizabeth (Edwards) Hartley, Manhattan, Kan. Housewife.
 John Frost, Schroyer, Kan. Farmer.
 Effie (Gilstrap) Frazier, Chandler, Okla. Housewife.
 Ava (Hamill) Tillotson, M. S., Hill City, Kan. Housewife.
 J N Harner. Died in 1897.
 Loyall S. Harner, Junction City, Kan. Farmer.
 Charles Pinckney Hartley, M. S., Washington, D. C. Division of vegetable physiology and pathology, United States department of agriculture.
 John William Abraham Hartley, Manhattan, Kan. Farmer and teacher.
 James Laird McDowell, Elkton, Colo. Assayer.
 Robert A. McIlvaine, Durham, Kan. Principal of schools.
 Kate (Oldham) Sisson, Manhattan, Kan. Housewife.
 Daniel Henry Otis, M. S., Manhattan, Kan. Assistant professor of dairying, Kansas State Agricultural College.

*B. S. has been granted all graduates since 1877.

Ivan Bryan Parker, M. D., Hill City, Kan. Physician, and president Graham County State Bank.
 Warner S. Pope. Died in 1899.
 Burton Homer Pugh, Oakland, Kan. Farmer, and student, University of Kansas.
 Elias W. Reed, Ann Arbor, Mich. Medical student.
 Robert Stirling Reed, Emporia, Kan. Student, State Normal School.
 Arthur Daniel Rice, Keats, Kan. Minister.
 Fred C. Sears, M. S., Wolfville, Nova Scotia. Director of provincial school of horticulture.
 Birdie E. Secrest, Randolph, Kan. Clerk.
 May Secrest, Manhattan, Kan. Assistant in sewing, Kansas State Agricultural College.
 Ruth Tipton (Stokes) Sears, M. S., Wolfville, Nova Scotia. Housewife.
 Harry W. Stone, Portland, Ore. General secretary Y. M. C. A.
 Walter Percival Tucker, Aveno, Mexico. Cashier for mining company.
 Mary Alice (Vail) Waugh, Burlington, Vt. Housewife.
 Robert Lynn Wallis. Died in 1895.
 Ora Rebecca (Wells) Traxler, Irving, Kan. Housewife.
 Daniel F. Wickman, P. O. box 107, Topeka, Kan. Farmer.
 George Washington Wildin, Jersey City, N. J. Mechanical engineer for the Central Railroad Company of New Jersey.
 Charles Ernest Yeoman, La Crosse, Kan.

1893.*

Edmund Clarence Abbott, Red River, N. M. Lawyer.
 Edwin McMaster Stanton Curtis, Houston, Tex. Clerk in Missouri Pacific railroad office.
 Corinne Louise (Daly) Burtis, Stillwater, Okla. Housewife.
 Laura Greeley Day, Menominee, Wis. Instructor in household economy, Stout Manual Training School.
 Ione (Dewey) Sutherland, 3554 Cottage Grove avenue, Chicago, Ill. Housewife.
 Albert Dickens, Manhattan, Kan. Assistant horticulturist and postgraduate student, Kansas State Agricultural College.
 Mary Maud Gardiner, M. S., Stillwater, Okla. Professor of domestic science, Oklahoma Agricultural and Mechanical College.
 Susie (Hall) Linscott, Holton, Kan. Housewife.
 Mary Frances Burgoyne Harman, Valley Falls, Kan. Teacher.
 Ivy Frances Harner, M. S., Ruston, La. Teacher of domestic science, Louisiana Industrial Institute.
 Margaretha Elise Horn, Dr. O., 335 Hubbard avenue, Detroit, Mich. Teacher of sciences, Detroit high school.
 Marcia Ione Hulett, Akron, Ohio. Osteopathist.
 Mac F. Hulett, 120 East Gay street, Columbus, Ohio. Osteopathist.
 Fred Hulse, Manhattan, Kan. Carpenter.
 Charles Augustus Kimball, Courtland, Kan. Editor and lawyer.
 Maud Ethel Knickerbocker, Terraville, S. Dak. Teacher.
 Thomas Eddy Lyon, Springfield, Ill. Lawyer.
 William Otis Lyon, 103 Seaton street, N. W., Washington, D. C. Clerk.
 McLeod Wilson McCrea, Winchester, Kan. Farmer.
 Rose Edith McDowell, Elkton, Colo. At home.
 George Lane Melton, Chicago, Ill. Student, University of Chicago.
 Eusebia DeLong (Mudge) Thompson, Marysville, Kan. Housewife.
 Nora (Newell) Hatch, Manhattan, Kan. Housewife.
 August Fred. Niemoller, Stitt, Kan. Teacher.
 Susie Amanda Noyes. Died in 1894.
 Henry Leamer Pellett, 1524 Chestnut street, Philadelphia, Pa. Physician.
 Charles John Peterson, Topeka, Kan.
 Carl Frederic Pfuertze, Manhattan, Kan. Lumber dealer.
 John Dewitt Riddell, M. D., Enterprise, Kan. Physician.
 John Albert Rokes, Holton, Kan. Lawyer.
 Agnes (Romick) Edgar, Salubra, Idaho. Housewife.
 Fred. Raymond Smith, Manhattan, Kan. Lawyer and court stenographer.
 George Wildman Smith, M. D. Physician.
 William Elmer Smith, 501 and 502 Massachusetts building, Kansas City, Mo. Lawyer.
 John Eugene Thackrey, Chapman, Kan. Minister.
 Joseph B. Thoburn, Oklahoma City, Okla. Editor.
 Charles Henry Thompson, Sera Cruz, Cal. Poultry farmer.
 George K. Thompson, Marysville, Kan. County superintendent.
 William James Yeoman, Mankato, Kan. Merchant.

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1894.*

Frank Weber Ames, New York, N. Y. Clerk, National Steel Company.
 Clara Francelia Castle, M. S., Manhattan, Kan. At home.
 George Luther Christensen, Houghton, Mich. Instructor in mechanical engineering and drawing, Michigan School of Mines.
 John Cornelius Christensen, Manhattan, Kan. Assistant county treasurer.
 Lorena Estella Clemons, Manhattan, Kan. Secretary, Kansas State Agricultural College.
 Martha Cottrell, Wabaunsee, Kan. At home.
 Sarah Esther (Cottrell) Wright, Jennings, La. Housewife.
 Alverta May Cress, Manhattan, Kan. At home.
 Fannie Jane Cress, 71 Walton Place, Chicago, Ill. Artist.
 Ernest A. Donaven, M. D., Goodrich, Kan. Physician.
 Jephthah W. Evans, Manhattan, Kan. Physician.
 Isabelle Russell (Frisbie) Criswell, Manhattan, Kan. Housewife.
 Eugene Leonard Frowe. Died in 1898.
 Walter Harling, Lehi, Utah. Principal of New West Academy.
 Lorena Marguerite Helder, Boston, Mass. Student in conservatory of music.
 Mark V. Hester, Lawrence, Kan. Student, University of Kansas.
 Charles Ross Hutchings, Ottawa, Kan. Civil and sanitary engineer.
 Isaac Jones, jr., Rampart, Alaska. Alaskan Experiment Station.
 Stella Victoria Kimball, Manhattan, Kan. Teacher.
 Mary Eliza (Lyman) Otis, Manhattan, Kan. Housewife, and postgraduate student, Kansas State Agricultural College.
 William Henry Moore, Manhattan, Kan. Florist and horticulturist.
 Sarah (Moore) Foster, 314 Melrose ave., N. Seattle, Wash. Housewife.
 James Francis Odle, Manhattan, Kan. Farmer.
 Charles Randolph Pearson, Hoxie, Kan. Teacher.
 Horace Greeley Pope, 406 and 407 Massachusetts building, Kansas City, Mo. Lawyer.
 Minnie Louisa Romick, 567 N. Gordon st., Pomona, Cal. Teacher.
 Winnie Luella (Romick) Chandler, Argentine, Kan. Housewife.
 Victor Irvin Sandt, Home, Kan. Teacher.
 John Alfred Scheel, —, N. Dak. Farmer.
 Jacob Ulrich Secest, Randolph, Kan. Farmer.
 Charles Chrisfield Smith, Lyndon, Kan. Editor.
 Jennie Ruth (Smith) Strong, Kinsley, Kan. Housewife.
 Wesley Ohio Staver, 625 New York Life building, Kansas City, Mo. Lawyer.
 John Stingley, 1328 McGee street, Kansas City, Mo. Traveling salesman.
 John Edwin Taylor. Died in 1896.
 Delbert L. Timbers, Beloit, Kan. Teacher.
 Phebe Carey Turner, Vera, Kan. Teacher.
 Samuel Robert Vincent, Orie, Okla. Teacher.
 Lucy Helena Waters, A. M., Livermore, Cal. Teacher in high school.

1895.*

Edward Jones Abell, Leonardville, Kan. Farmer and teacher.
 Carl D. Adams.
 Robert John Barnett, Manhattan, Kan. Principal of Olathe high school.
 Burton Wesley Conrad, Sabetha, Kan. Liveryman.
 Florence Ruth Corbett, Brooklyn, N. Y. Supervisor of domestic science, Kings county hospital.
 Sid Henry Creager, Kansas City, Mo. Railway postal clerk.
 Elsie Emeline Crump, Manhattan, Kan. Teacher, city schools.
 David Thomas Davies, Riley, Kan. Farmer.
 Frank Andrew Dawley, Osborne, Kan. County clerk.
 Daisy Day, M. S., Onaga, Kan. At home.
 Flora (Day) Barnett, Manhattan, Kan. Housewife, and postgraduate student, Kansas State Agricultural College.
 George Adam Dean, Topeka, Kan. Teacher.
 Lillie Christena Dial, Cleburne, Kan. Teacher.
 Lucy Ellis, Westmoreland, Kan. Teacher.
 Victor Emrick, 998 East Taylor street, Portland, Ore. Passenger auditing clerk, Oregon Transportation and Navigation Company.
 George Forsyth, Franklin, Ind. Sales agent.
 Ernest Harrison Freeman, Chicago, Ill. Student, Armour Institute.

*B. S. has been granted all graduates since 1877.

Florence Eleanor (Fryhofer) Webster, Ames, Iowa. Housewife.
 George William Fryhofer, Ellettsville, Ind. Banker.
 Oscar Hugo Halstead, 218 South Sixth street, St. Joseph, Mo. Merchant.
 Hortensia (Harman) Patten, Sycamore, Ill. Stenographer.
 John Bright Harman, Valley Falls, Kan. Farmer.
 Clarence V. Holsinger, Rosedale, Kan. Fruit-raiser.
 Christian Andrick Johnson, Success, Kan. Farmer.
 John James Johnson, Russell, Kan. Physician.
 Fred. Ralph Jolly, Manhattan, Kan. Newspaper reporter.
 William Irving Joss, Kirksville, Mo. Student of osteopathy.
 Maud Estella (Kennett) Darnell, Kelso, Wash. Housewife.
 Myron Arthur Limbocker, 401 Portsmouth building, Kansas City, Kan. Lawyer.
 Samuel Alexander McDowell, Elkton, Colo. Clerk.
 Laura Sarah (McKeen) Smith, Russell, Kan. Housewife.
 Theo. Wattles Morse, M. S., Kansas City, Mo. Advertising solicitor for *Live-stock Indicator*.
 Oscar Albert Otten, Pierce Junction, Kan. Telegraph operator.
 William Hackworth Painter. Died in 1901.
 Charles Wesley Pape, M. S., Manhattan, Kan. Assistant in zoology, Kansas State Agricultural College.
 Ethel (Patten) Ames, New York, N. Y. Housewife.
 John Vernon Patten, Sycamore, Ill. Manufacturer.
 William H. Phipps, Kansas City, Mo. Brady-Meriden Creamery Company.
 Alice Julia (Quintard) Peck. Died in 1899.
 Frederick Ellsworth Rader, Sitka, Alaska. Alaskan Experiment Station.
 Ralph Waldo Rader, Topeka, Kan. Wolff Packing Company.
 Ada Rice, Manhattan, Kan. Assistant in preparatory department, Kansas State Agricultural College.
 Benjamin Franklin Simeon Royer, St. Joseph, Mo. Physician.
 Charles Baxter Selby, Marion, Va. Lawyer.
 Mabel Gertrude Selby, Argentine, Kan. Teacher.
 Ernest P. Smith, Manhattan, Kan. Carpenter.
 Frederick John Smith, Russell, Kan. Editor.
 Kitty Myrtle (Smith) Wheeler, Manhattan, Kan. Housewife.
 Marietta Smith, Denver, Colo. Student of nursing, Homeopathic hospital.
 William Henry Steuart, Winchester, Kan. Farmer.
 Cora Idella (Stump) Chaffee, Lasita, Kan. Housewife.
 Dora (Thompson) Winter, Omaha, Neb. Housewife.
 Elvin Creveling Trembly, Comiskey, Kan. Farmer.
 George Carpenter Wheeler, 381 Madison avenue, New York city. Railroad conductor.
 Mary Elizabeth (Willard) Emrick, 988 East Taylor street, Portland, Ore. Housewife.
 Olive Mabel (Wilson) Holsinger, Rosedale, Kan. Housewife.
 Ora Gertrude Yenawine, Randall's Island, New York, N. Y. Instructor in sewing, New York House of Refuge.

1896.*

May Haines Bowen, Chicago, Ill. Student, University of Chicago.
 Con Morrison Buck, M. S., Fort Madison, Iowa. Civil engineer on Santa Fe railroad.
 Margaret Isaphene (Carlton) Doane, College Park, Md. Housewife.
 William Annesley Cavanaugh, Manila, P. I. Lieutenant, company D, Twentieth infantry.
 William Arthur Coe, Coloma, Kan. Farmer.
 Charlotte Mabel (Cotton) Smith, Manhattan, Kan. Housewife.
 Ernest Brown Coulson, Alva, Okla.
 George Henry Dial, Cleburne, Kan. Teacher and farmer.
 Charles Francis Doane, M. S., College Park, Md. Assistant in dairying and bacteriology.
 John Berthold Dorman, box 206, Saratoga, N. Y. Teacher.
 Bradford Dougherty, Kansas City, Kan. Merchant.
 Charles Silas Evans, Manila, P. I. Hospital corps.
 Robert Kilby Farrar, Axtell, Kan. Teacher.
 George William Finley, Wauneta, Kan. Teacher.
 Joanna Freeman. Died in 1897.
 John Jacob Fryhofer, Joplin, Mo. Stenographer.
 Elmer George Gibson, Stockdale, Kan. Farmer, and postgraduate student, Kansas State Agricultural College.
 George Clifton Hall, Morganville, Kan. Mechanic.

*B. S. has been granted all graduates since 187

Alonzo Charles Havens, Dwight, Kan. Farmer.
 Gertrude Julia (Havens) Norton, St. Louis, Mo. Housewife, and postgraduate student, Kansas State Agricultural College.
 Lawrence Wilbur Hayes, 1028 Kansas ave., North Topeka, Kan. Attendant, asylum for insane.
 John Warren Holland, Manila, P. I. Assistant cashier, United States custom-house.
 Henry George Johnson, 358 Marsfield street, Chicago, Ill. Student in dentistry.
 Susan Effie (Johnson) Cooper, Success, Kan. Housewife.
 Marian Elizabeth Jones, Manhattan, Kan. Postgraduate student and assistant in domestic art department, Kansas State Agricultural College.
 Thomas Lormar Jones, 1000 Walnut street, Kansas City, Mo. Piano-tuner.
 Edward Clarence Joss, Chicago, Ill. Student, Chicago Veterinary College, and postgraduate student, Kansas State Agricultural College.
 Royal S. Kellogg, M. S., Washington, D. C. Division of forestry, United States department of agriculture.
 Mark Kirkpatrick, Fredonia, Kan. United States land surveyor.
 Edith Lynette Lantz, Alma, Kan. Teacher.
 Sue Long, Manhattan, Kan. Newspaper reporter.
 Charles W. Lyman, Salina, Kan. Commercial traveler.
 Charles Dwin McCauley, 417 Madison street, Topeka, Kan. Draughtsman.
 Charles Sumner Marty, Sun City, Kan. Farmer.
 Elda Lenore (Keen) Moore, Manhattan, Kan. Housewife.
 Arthur Houston Morgan, Hillside, Kan. Farmer.
 Clara Verena Newell, Shubert, Neb. At home.
 Ellen Elizabeth (Norton) Adams, Manhattan, Kan. Housewife.
 John Bitting Smith Norton, St. Louis, Mo. Assistant in Missouri Botanical Garden.
 Hattie A. (Paddleford) McFadden, Walsburg, Kan. Housewife.
 Mary Kerilla (Painter) Rogers, Ashland, Kan. Housewife.
 Elva Luthera (Palmer) Thackrey, Chapman, Kan. Housewife.
 Inez Luella (Palmer) Barrows, Washington, Kan. Housewife.
 Fannie (Parkinson) Moyer, Ottawa, Kan. Housewife.
 Archie Carpenter Peck, Newton, I. T. Manager of mill and cotton-gin.
 Arthur Louis Peter, M. D., Denver, Colo. Physician, Denver Homeopathic College.
 Charles Edwin Pincomb, Hector, Kan. Stockman.
 Mary Josephine Pincomb, New York, N. Y. Student, Teachers' College.
 John Poole, Briggs, Kan. Farmer.
 Edgar Arthur Powell, Osage City, Kan. Farmer and stock-raiser.
 Lisle Willits Pursel, Kansas City, Mo.
 Howard Newton Rhoades, Manhattan, Kan. Assistant postmaster.
 Ambrose Elliott Ridenour, Randolph, Kan. Farmer.
 Mary Etta (Ridenour) Plowman, Jewell City, Kan. Housewife.
 Isaac Archie Robertson, Lexington, Mo. Telegraph operator.
 Grace Anna Secrest, Akron, Ohio. Instructor in sewing, city schools.
 Carl Snyder, Oskaloosa, Kan. Farmer.
 Max Gilbert Spalding, Eureka, Kan. Teacher and farmer.
 Orville Ashford Stingley, 1323 McGee street, Kansas City, Mo. Meat inspector, Armour's.
 Sadie Stingley, Manhattan, Kan. Teacher in city schools.
 Gertrude Ella Stump, Manhattan, Kan. At home.
 Miriam Esther Swingle, 116 High street, Peoria, Ill. Assistant in household economy, Bradley Polytechnic Institute.
 William Elwood Thackrey, Geneva, Nebraska. Manual training teacher, Indian service.
 James Dunbar Trumbull, Manhattan, Kan. Clerk.
 Frank Edwin Uhl, Manhattan, Kan. Herdsman, Kansas State Agricultural College.
 Edwin H. Webster, Ames, Iowa. Assistant in dairying, Iowa State College.

1897. *

Cora Atwell, Topeka, Kan. Teacher.
 Roger William Bishoff, Eudora, Kan. Farmer.
 Mary Frances Carnell, Denver, Colo. Milliner.
 William Burns Chase, Hoyt, Kan. Hardware merchant.
 Frank E. Cheadle, Erwin, Okla. Painter.
 Robert Waitman Clothier, M. S., Manhattan, Kan. Assistant in chemistry, Kansas State Agricultural College.
 Maggie A. (Correll) Uhl, Manhattan, Kan. Housewife.
 Mabel Crump, 1233 Washington street, Kansas City, Mo. Stenographer.

*B. S. has been granted all graduates since 1877.

Fred Volley Dial, Cleburne, Kan. Clerk.
 Viola Grace Dille, Edgerton, Kan. At home.
 Samuel Dolby, Lexington, Ky.
 George Doll, Larned, Kan. Teacher and farmer.
 Anna Phillipina (Engel) Blackman, Manhattan, Kan. Housewife.
 Emma Finley, Manhattan, Kan. Teacher, city schools.
 Martha Fox, Topeka, Kan. Student of nursing, Christ's hospital.
 Philip Fox, Salina, Kan. Commandant, St. John's Military Academy, and postgraduate student, Kansas State Agricultural College.
 Ned Merrill Green, Fort Crook, Neb. Second lieutenant, Twenty-fifth infantry, United States army.
 Mary Eliza Haulenbeck, Manhattan, Kan. At home.
 Lewellyn Gaines Hepworth, Scranton, Kan. Insurance.
 Ina Emma Holroyd, Manhattan, Kan. Assistant and postgraduate student, Kansas State Agricultural College.
 Myrtle Hattie (Hood) Johnson, Success, Kan. Housewife.
 Charles Henry Hoop, Manhattan, Kan. Mechanic.
 Winifred Anna (Houghton) Buck, Fort Madison, Iowa. Housewife.
 Bret Redmon Hull, Alta Vista, Kan. Lumber dealer.
 Clay Berkey Ingman, Barnes, Kan. Farmer.
 Gertrude May (Lyman) Hall, 2812 Thirteenth street, N. W., Washington, D. C. Housewife.
 Frederick Hugo Meyer, Mount Vernon, S. Dak. Creamery company.
 Valentine Maelzer, Morse, Idaho. Farmer and teacher.
 Sherman Bodwell Newell, Zeandale, Kan. Teacher and farmer.
 Oliver Ezra Noble, Manhattan, Kan. County surveyor, and traveling salesman, McCormick Harvester Company.
 Jesse Baker Norton, Manhattan, Kan. Assistant in entomology and postgraduate student, Kansas State Agricultural College.
 Mary Augusta Norton, Manhattan, Kan. Nurse, and postgraduate student, Kansas State Agricultural College.
 Bertha Olivia Olson, Manhattan, Kan. At home.
 Hilda Sophia Olson, Manhattan, Kan. Teacher, and postgraduate student, Kansas State Agricultural College.
 Russell John Peck, McFarland, Kan. Teacher.
 William Oscar Peterson, Randolph, Kan. Farmer.
 Eva Louise Philbrook, Louisville, Kan.
 Rufus M. Philbrook, Louisville, Kan.
 William Joseph Rhoades, Shockey, Kan. Ranchman.
 Carl Rice, Appari, Manila, P. I. Corporal, company A, Sixteenth infantry.
 Thomas Meade Robertson, Coffeyville, Kan. Dentist.
 Homer Joseph Robison, Topeka, Kan. Machinist.
 Edward Shellenbaum, Randolph, Kan. Clerk in post office.
 Alice Myrtle Shofe, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.
 Charles Wesley Shull, Manhattan, Kan. Farmer.
 Alfred Caleb Smith, 1629 Ninth avenue, Seattle, Wash. Electrical engineer.
 Phoebe Jane Smith, Pueblo, Colo. Teacher, city schools.
 Wilhelmina Henrietta Spohr, Manhattan, Kan. Teacher, city schools.
 Charles Harrison Stokely, Sedalia, Mo. Student, Central Business College.
 John E. Trembly, Comiskey, Kan. Farmer.
 Harriet Agnes Vandivert, Wichita, Kan. Teacher of domestic science, Fairmount College.
 Olive Voiles, Cedar Rapids, Iowa. Nurse, St. Luke's hospital.
 John Minton Westgate, M. S., Manhattan, Kan. Assistant botanist, Kansas State Agricultural College.
 Mark Wheeler, Manila, P. I. First lieutenant, Fourth United States infantry.
 Clare Annie (Wilson) Dutton, Mapleton, Kan. Housewife.

1898.*

Emory Sherwood Adams, Manila, P. I. Corporal, company G, Second United States infantry.
 Joshua William Adams, Cheyenne Wells, Colo. Rain Belt Experiment Station.
 Samuel John Adams, Manhattan, Kan. General secretary of Kansas State Agricultural College
 Y. M. C. A.
 Thomas Walter Allison, Florence, Kan. Farmer and fruit-grower.

*B. S. has been granted all graduates since 1877.

William Anderson, Manhattan, Kan. Assistant in mathematics, Kansas State Agricultural College.

Jessie Geneva Bayless, Yates Center, Kan. At home.

Hope Brady, Manhattan, Kan. Teacher, city schools.

Robert Henry Brown, Manhattan, Kan. Assistant in music, Kansas State Agricultural College.

Earl Carver Butterfield, Millbrook, N. Y. Gardener.

John Alfred Conover, Kearney, Neb. Dairy farmer.

Minnie Laura Copeland, 356 Hermitage avenue, Chicago, Ill. Student of nursing, Chicago Homeopathic hospital.

Lucy Maria (Cottrell) Pottorf, Riley, Kan. Housewife.

Anna Magdalena Dahl, Webber, Kan. Teacher.

Inga Josephine Dahl, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.

Cassie Belle Dille, Edgerton, Kan. Teacher.

Emma Phillipine Doll, Larned, Kan. Teacher.

Cora Elizabeth (Ewalt) Brown, Manhattan, Kan. Housewife.

Guy Francis Farley, Melvern, Kan. Farmer.

Mary (Finley) Ridenour, Randolph, Kan. Housewife.

Arthur Lorenzo Frowe, Wamego, Kan. Teacher.

William Logan Hall, M. S., Washington, D. C. Assistant in division of forestry, United States department of agriculture.

Anna Viola (Hanson) Higinbotham, Manhattan, Kan. Housewife.

Walter Eugene Hardy, Manhattan, Kan. Farmer.

James Madison Harvey, Junction City, Kan. Farmer.

Emmett Vivian Hoffman, Enterprise, Kan. Bookkeeper.

Guy Dudley Hulett, Kirksville, Mo. Student of osteopathy, and postgraduate student, Kansas State Agricultural College.

Bertha Emma Ingman, Barnes, Kan. At home.

Ary Cordelia Johnson, St. Louis, Mo. Stenographer.

Charles Percy King, Eldorado Springs, Mo. Lumberman.

Bessie May Locke, Riley, Kan. Teacher.

Olive Long, 1957 Logan avenue, Denver, Colo. Clerk in city offices.

William Andrew McCullough, Kansas City, Mo. Student and assistant in dispensary, Kansas City Medical College.

Inez Isadore (Manchester) Allison, Florence, Kan. Housewife.

Florence Adelia Martin, Junction City, Kan. At home.

Henry Alba Martin, Admire, Kan. Creamery.

Alice Maude Melton, Manhattan, Kan. Clerk in director's office of Experiment Station.

George Gerkein Menke, Garden City, Kan. Stockman.

Mary Frances Minis, Manhattan, Kan. Teacher.

May Moore, Manhattan, Kan. Bookkeeper.

Harriet Grace Nichols, Manhattan, Kan. Assistant and postgraduate student, Kansas State Agricultural College.

Schuyler Nichols, Liberal, Kan. Physician, and postgraduate student, Kansas State Agricultural College.

Lucy Junie Parks, Manhattan, Kan. Teacher.

Ernest Byron Patten, 117 E. 238th street, Los Angeles, Cal. Dairy farmer, and postgraduate student, Kansas State Agricultural College.

C. Jeanette Perry, Manhattan, Kan. Clerk in secretary's office, Kansas State Agricultural College.

Emilie Matilda Pfuetze, Manhattan, Kan. Cashier in store.

John Martin Pierce, Healdsburg, Cal. Farmer.

Raymond Haines Pond, M. S., College Park, Md. Assistant in botany and pathology.

William Poole, Briggs, Kan. Farmer.

Willis Thomas Pope, Doylestown, Pa. Horticulturist, National Farm School.

Nora May (Reed) Pierce, Healdsburg, Cal. Housewife.

Gertrude Elizabeth Rhodes, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.

Henry William Rogler, Matfield Green, Kan. Farmer.

Ferdinand John Rumold, Dillon, Kan. Farmer.

Martin Wilbur Sanderson, R. F. D. No. 1, Marysville, Kan. Deputy county surveyor and farmer.

Olive Maria Shelden, Manhattan, Kan. At home.

Edwin Lee Smith, Manhattan, Kan. Teacher.

* B. S. has been granted all graduates since 1877.

Oliver Russell Smith, Socorro, N. M. Student and instructor in New Mexico School of Mines.
 Bertha Spohr, Peoria, Ill. Teacher and student, Bradley Polytechnic Institute.
 Andrew B. Symms, R. D. R. No. 4, Atchison, Kan. Farmer.
 Cora Thackrey, Valentine, Neb. Teacher.
 Harriet Emerson Thackrey, Valentine, Neb. Clerk in county treasurer's office.
 Henry Marsden Thomas, Olivet, Kan. Creamery man.
 Elsie Lucile Waters, Keats, Kan. Postgraduate student, Kansas State Agricultural College.
 Fred Dorsey Waters, Manhattan, Kan.
 Abner Davis Whipple, Marion, Ala. Instructor, Marion Military Academy.
 Adelaide Frances Wilder, M. S., Manhattan, Kan. Postgraduate and assistant, Kansas State Agricultural College.
 Josephine Hannah Wilder, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.
 Frank Yeoman, 501 and 502 Massachusetts building, Kansas City, Mo. Lawyer.
 Frederick Zimmerman, Moray, Kan. Stockman and farmer.

1899.*

Bonnie Frances Adams, Emporia, Kan. Student, State Normal School.
 Morrison Carpenter Adams, Manhattan, Kan. Teacher, and postgraduate student, Kansas State Agricultural College.
 Melvia Fairetta Avery, Manhattan, Kan. Teacher.
 Albert Edwin Blair, Topeka, Kan. Continental Creamery Company.
 James Courtney Bolton, Paxico, Kan. Farmer.
 Joseph Abbott Butterfield, Success, Kan. Farmer.
 Willit Ramson Correll, Overbrook, Kan. Farmer.
 Ernest Lerner Cottrell, Wabaunsee, Kan. Farmer.
 Alfred Burton Dille, Edgerton, Kan. Farmer.
 Francis Joseph Habiger, Bushton, Kan. Farmer and teacher.
 John George Haney, Vinisica, Mexico. Agricultural agent Chihuahua & Pacific Railroad Company.
 John Andrew Harvey, Junction City, Kan. Farmer.
 Grace Edna Hill, Stockdale, Kan. Teacher.
 Hiram Adsit Holzer, Pittsburg, Kan. Draughtsman for Santa Fe railroad.
 Charles Clifford Jackson, Doylestown, Pa. Instructor at National Farm School.
 Fred Emanuel Johnson, Melvern, Kan.
 Harry Wallace Johnston, Caldwell, Kan. Farmer.
 Lot Parker Keeler, Manila, P. I. Corporal, Fortieth U. S. volunteers.
 John Martin Kessler, St. Joseph, Mo. Gardener and florist.
 Albert Thomas Kinsley, Manhattan, Kan. Assistant in veterinary science and postgraduate student, Kansas State Agricultural College.
 Frank Elmer LaShelle, Valparaiso, Neb. Teacher and printer.
 Christian Dagobert Lechner, Leland Stanford, Cal. Student, Leland Stanford Jr. University.
 Ross Long, 227 Harrison street, Topeka, Kan. Clerk.
 Louisa Mary (Maelzer) Haise, Russell, Kan. Housewife.
 Kate Anna Manly, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.
 Claud Masters, Hillsdale, Kan. Druggist.
 Robert Burtice Mitchell, Manila, P. I. Second lieutenant, company E, Fortieth U. S. volunteers.
 Jennie June Needham, Lane, Kan. At home.
 Roscoe Townley Nichols, Liberal, Kan. Medical student, and postgraduate student, Kansas State Agricultural College.
 Fanny Gertrude Noyes, Topeka, Kan. Student, Topeka Business College.
 Harry Delphos Orr, 2515 Michigan avenue, Chicago, Ill. Student, Northwestern University.
 George Washington Owens, Tuskegee, Ala. Professor of agriculture and dairying.
 Carrie Vashti Painter, Meade, Kan. Teacher.
 Ella Emerson Peck, Lexington, Okla. Teacher.
 Anna C. Pfuetze, Olathe, Kan. Teacher of household economy in deaf and dumb institution.
 Andrew Pottorf, Riley, Kan. Farmer.
 Mary Bly Pritner, Manhattan, Kan. Assistant in domestic science and postgraduate student Kansas State Agricultural College.
 Otto Independence Purdy, Fairview, Kan.
 Delmer William Randall, Manhattan, Kan. Farmer, and postgraduate student, Kansas State Agricultural College.
 William Harry Roberts, Perry, Okla. Principal of schools.

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Frank Sessions Shelton, Seattle, Wash. Bookkeeper.
 Louisa Mary Spohr, Chicago, Ill. Student, nurses' training school.
 Annie Louisa Streeter, Milford, Kan. At home; postgraduate student, Kansas State Agricultural College.
 Nellie Towers, Manhattan, Kan. At home.
 Otho Sprague True, Vera, Kan. Farmer.
 James Otis Tulloss, Sedan, Kan. Clerk.
 William Guy Tulloss, Rantoul, Kan. Farmer.
 George Franklin Wagner, Enterprise, Kan. Stock farmer.
 Mary Lana (Waugh) Smith, 1629 Ninth avenue, Seattle, Wash. Housewife and journalist.
 Charles Bernard White, Manhattan, Kan.
 Nannie Elizabeth Williams, Sedalia, Mo. Stenographer.
 Alexander George Wilson, Russell, Kan. Printer.
 Frederick Otto Woestemeyer, Kansas City, Kan. Teacher.

1900.*

Lizzie Jane Agnew, Manhattan, Kan. Assistant and postgraduate student, Kansas State Agricultural College.
 Elizabeth Edna (Asbury) Derr, Topeka, Kan. Housewife.
 Effie Elizabeth Bailey, Manhattan, Kan. At home.
 Alvah I. Bain, Marysville, Kan. Farmer.
 Harry H. Bainer, Pleasant Hill, Kan. Creamery man.
 Charlotte Almira Berkey, Cleveland, Mo. Teacher.
 John Harold Blachly, Manhattan, Kan. Teacher.
 Minerva Blachly, Manhattan, Kan. Teacher.
 Zina Leigh Bliss, Washington, D. C. Division of forestry, United States department of agriculture.
 Fred Winchester Bobbitt, Tulsa, I. T. Civil engineer.
 Lillie Grace Bolton, Paxico, Kan. At home.
 Prudence Dell Broquet, Greeley, Colo. Student, Colorado State Normal School.
 Nellie (Burtner) Sargent. Died in 1901.
 Clarence Asa Chandler, Argentine, Kan. Teacher and fruit-grower.
 Frederick Waldemar Christensen, Mariadahl, Kan. Farmer.
 Ernest Mansel Cook, Oakley, Kan. Farmer.
 Charles McClain Correll, Manhattan, Kan. Teacher, and postgraduate student, Kansas State Agricultural College.
 Jennie Maude Currie, Topeka, Kan. At home.
 Harry Leroy Dern, Kingman, Kan. Teacher.
 Homer Derr, Topeka, Kan. General offices, Santa Fe railroad.
 Mary Alberta (Dille) Hulett, Kirksville, Mo. Housewife.
 Robert Edward Eastman, 224 Hazen street, Ithaca, N. Y. Student Cornell University.
 Jennie Edelblute, Keats, Kan. At home.
 Eugene Emrick, Pittsburg, Kan. Collector for L. B. Price & Co.
 Josephine Finley, Randolph, Kan. Postgraduate student, Kansas State Agricultural College.
 Harry Verne Forest, Thayer, Kan. Draughtsman.
 George Ogden Greene, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.
 Hermann Haffner, Junction City, Kan. Florist.
 Gustaf William Hanson, Leeds, Mo. English Supply and Engine Company.
 James William Harner, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.
 Daisy Gladys Hoffman, Chicago, Ill. Student.
 Walter Fisk Lawry, 1616 St. Louis avenue, East St. Louis, Mo. Draughtsman for Sickles, Harrison & Howard Iron Company.
 Amanda Culp McCarty, Mountain Grove, Mo. Instructor in music.
 N. Ollie McCurry, Milo, Kan. At home.
 George G. McDowell, Elkton, Colo. Miner.
 Roland McKee, Blue Rapids, Kan. Farmer.
 Nettie McLaren, Altoona, Kan. At home.
 Charles Dudley Montgomery, Leland Stanford, Cal. Student, Leland Stanford Jr. University.
 Fred Byers Morlan, White Rock, Kan. Farmer.
 Andrew Edward Oman, Walsburg, Kan. Teacher.
 Kate Paddock, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.
 Joseph Loyd Pancake, Tully, Kan. Stock-raiser.

*B. S. has been granted all graduates since 1877.

Albert William Parrack, Riley, Kan.
Edith Perkins, box 52, South Pasadena, Cal. At home.
Elenore Perkins, box 52, South Pasadena, Cal. At home.
Paul du Chaillu Piersol, Manhattan, Kan. Laundry wagon.
Luther Eugene Potter, Kansas City, Mo. Insurance agent.
Clara Spilman, Manhattan, Kan. Postgraduate student, Kansas State Agricultural College.
Mabel Stewart, Neosho, Mo. Teacher.
Stella Stewart, Council Bluffs, Iowa. Teacher of domestic science.
Fayette Charles Sweet, Burlington, Kan. Farmer.
Cora Edith Swingle, New York, N. Y. Student, Pratt Institute.
Dean Brett Swingle, Madison, Wis. Postgraduate student, University of Wisconsin.
Barton Thompson, Garrison, Kan. Teacher.
Laura Helen Trumbull, Manhattan, Kan. Teacher, and postgraduate student, Kansas State Agricultural College.
Jessie May Wagner, Enterprise, Kan. At home.
Luther Watts Waldraven, Randolph, Kan. Farmer.
Kate Elizabeth Zimmerman, Moray, Kan. At home.

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SUMMARY.

The number of graduates up to 1901 is 755, of whom 279 are women. Graduates previous to 1877 pursued, with two exceptions, a classical course, and received the degree of bachelor of arts. Since 1877, all have received the degree of bachelor of science, after a four-year course in the sciences, with good English training.

Of the 476 men, 18 are deceased, and the remainder are reported in the following occupations:

Farmers and stock-raisers	94
Fruit-growers, nurserymen, and gardeners	10
Professors and instructors in colleges	29
Superintendents of agricultural experiment stations	2
Assistants in agricultural experiment stations and agricultural colleges	13
In United States department of agriculture	9
In United States government civil service	7
In military service	11
County superintendents of public instruction	2
Superintendents and teachers in public schools	45
Teachers in Indian schools	3
Postgraduate students in K. S. A. C.	16
Students in other institutions	19
Physicians and students of medicine, druggists, and dentists	24
Lawyers and students of law	28
Ministers and secretaries of Y. M. C. A.	11
Journalists	21
Architects and builders	13
Civil, electrical, mining and mechanical engineers	13
Mechanics	4
Manufacturers	4
Miners	3
Telegraph and telephone managers and operators	5
Officials and official clerks	20
Clerks and bookkeepers	19
Commercial travelers	7
Merchants	25
Bankers and cashiers	9
Other professional men	3
Creamery men	8
Agents	7
Unknown	18
Total	502
In two occupations	44
	458

Of the 279 women, 11 are deceased, and the remainder occupied as follows:

Housewives	108
Teachers in public schools	41
Teachers of domestic science and domestic art	15
Professors and instructors in colleges	4
Teachers of art and music	5
Physicians	2
Students in other institutions	16
Postgraduate students in K. S. A. C.	23
Assistants in agricultural colleges and experiment stations	10
Secretary of K. S. A. C.	1
Librarians	2
Nurses	3
Bookkeepers, stenographers, and clerks	12
Milliners and dressmakers	3
Journalists	4
At home	32
Unknown	4
Total	285
In two occupations	17
	268

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